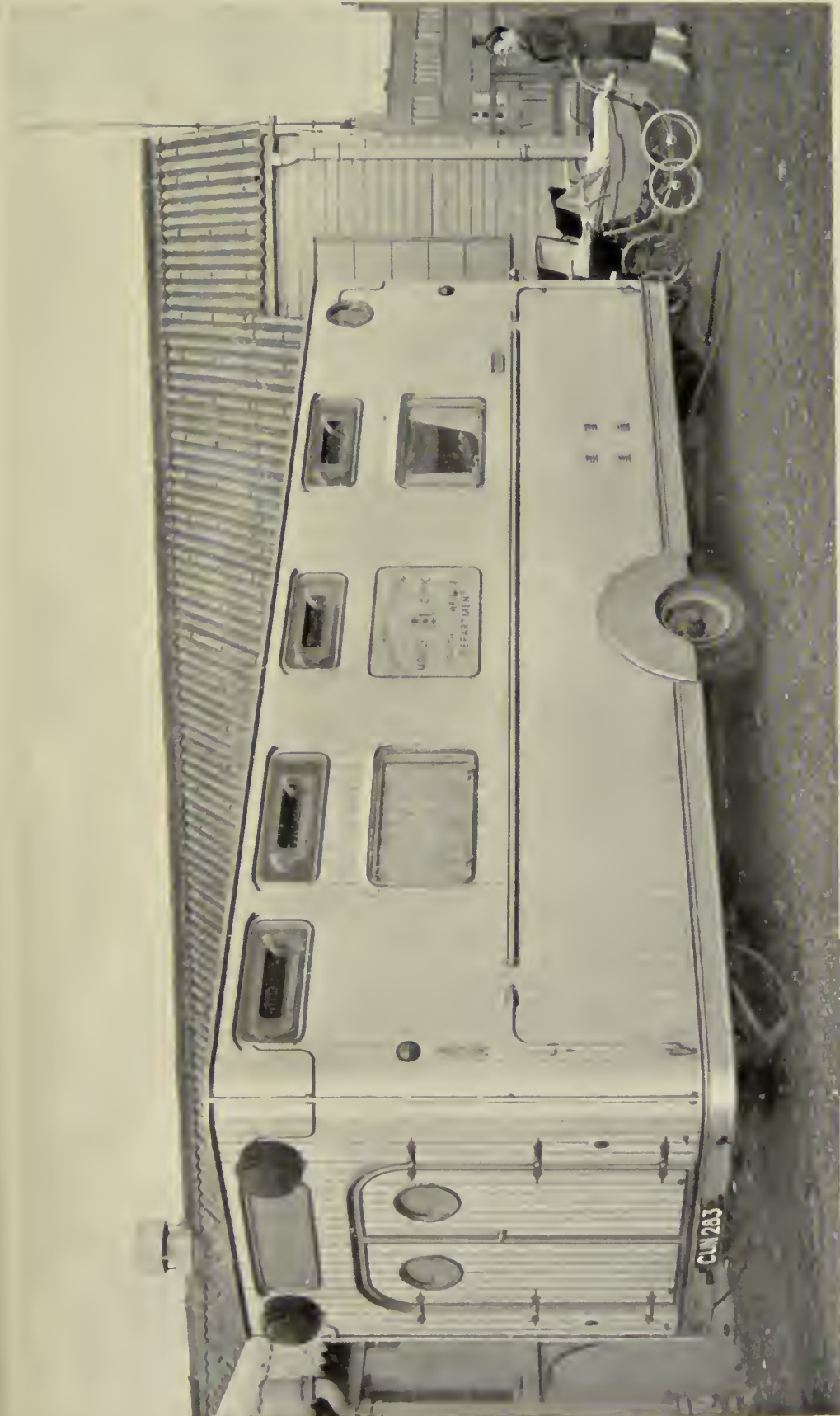


Report
of the
Medical Officer of Health
City of Glasgow



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THE CORPORATION OF THE CITY OF GLASGOW



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PREFACE

The year has been a notable one in the health statistics of the city. Owing to the milder weather experienced throughout the year there was less respiratory disease, and in consequence fewer deaths. The death rate, 11·82, was the lowest yet recorded in the city. Births were fewer, but this was to some extent offset by the much reduced infant mortality rate, which at 36 was the lowest ever recorded. Despite a considerable natural increase the population has decreased still further to 1,085,000, the result of the continuing migration outwith the city boundary. With further progress in house building during the year the number of occupied houses rose to 307,783, and occupancy of houses in new schemes has entailed considerable redistribution of population.

Last year I selected for comment in the Preface those aspects of the Department's work principally concerned with the administration of the National Health Service Act. This year I shall deal in particular with the Department's duties under Public Health legislation.

MATERNAL AND CHILD CARE.

The record low infant mortality rate of 36 per 1,000 is one-third of what it was twenty years ago, and the fall has been due mainly to the decrease in the number of infant deaths after the first month of life. The deaths in the early days and weeks of life are not being reduced nearly so rapidly and account for over 60 per cent. of the total deaths. A further unsatisfactory feature is the similar slow rate of decline in the still birth rate, which was 27 per 1,000 in 1953, the same as the rate in 1952. It is evident that further research is urgently required in this field.

A high standard of ante-natal care is essential, and the expectant mother must be taught that her diet has an important bearing on the health of her infant. It is a great pity that fewer mothers are now attending the Corporation ante-natal clinics where mothercraft teaching is carried out. All those concerned in the care of the expectant mother should co-operate to ensure that every mother receives adequate and effective teaching during her pregnancy.

The necessity for teaching mothercraft cannot be better emphasised than by considering the deaths of infants from violent causes. During the year no fewer than 58 children died in this way, more than half of these being suffocated by inhalation of vomit or regurgitation of food and 23 being suffocated by pillows, bedcovers or overlaying.

Another point of importance is that of the total infant deaths only a little over nine per cent. of the infants had been breast-fed, and in the asphyxia group of deaths the vast majority were artificially fed. A still further reduction in the number of deaths could be achieved if babies were breast-fed for the first three months of life. These facts emphasise the continued need of the educative work of the Maternity and Child Welfare Services.

The striking improvement in the health of young children is shown in the vital statistics for the age group 1-5 years. During the last 25 years there has been not only a steady fall in the number of deaths but also a changing pattern in mortality. No longer are the infectious diseases of childhood the major cause of death. Their place has been taken by accidental and violent deaths. Of the total 118 deaths in this age group, 21 were due to accidents. A further point of importance is that of these 21 deaths only seven were due to road accidents. Seven occurred in the home, and seven were due to other types of accident, climbing, drowning, etc. The next largest cause of death was congenital malformations, which accounted for 15 deaths. The third largest cause was tuberculosis. Six children died from pulmonary tuberculosis and six from tubercular meningitis.

MENTAL HYGIENE.

In the Maternity and Child Welfare Department more attention is now being directed to preventive psychiatry as applied to child health. The child welfare medical officers and health visitors have a unique opportunity of helping and advising the mothers about their own mental attitudes and the emotional development of their children. A special clinic called a "Problems Clinic" has been established at Florence Street Child Welfare Centre. This clinic is in the charge of one of the child welfare medical officers who has had special training and experience in this aspect of child health. A great deal of the value of the clinic lies in its ready acceptance by the mothers. It is important, therefore, that a clinic of this kind should retain as nearly as possible the characteristics of an ordinary child welfare clinic. The parents are helped to resolve difficulties which are arising in the upbringing of the child and to relieve possible tensions in the child's

environment. Cases of enuresis, temper tantrums, unnatural fears, morbid shyness, and anxiety states and depression of mothers are examples of the types of cases dealt with at this special clinic. A beginning must be made in childhood to try to secure good mental health and capacity and prevent its breakdown.

HOME NURSING SERVICE.

This domiciliary service is playing an increasingly important part in the health service. It is being realised that wherever possible sick persons should be nursed at home and only admitted to hospital if hospital care is essential. A striking feature of the Home Nursing Service during 1953 was the very large number of cases of tuberculosis dealt with by the Queen's nurses. This increase is due to two main reasons—the modern treatment by streptomycin, etc., which can be carried out in the patient's own home, and the number of patients who can now be so dealt with at home because of the policy of granting new houses to cases of tuberculosis. The number of such cases treated by the Home Nursing Service rose from 315 in 1952 to 810 in 1953, and the visits from 10,138 to 23,219. The place of the Home Nursing Service in the care of tuberculous patients has become very important indeed.

HOME HELP SERVICE.

The Home Help Section was inaugurated before the National Health Scheme, but it received a great impetus then. Its function was to supply domestic assistance in cases of urgent need for limited periods. To-day 60 per cent. of the 1,000 home helps are permanently allocated to the chronically ill or to elderly frail persons. Many of these should be in hospital, but the Secretary of State and other Government spokesmen have recently advocated home care wherever possible. If this useful service is to be maintained or extended the burden of financing it should be borne by the Government when it exceeds its original scope.

INFECTIOUS DISEASES.

The number of cases of infectious diseases notified in 1953 was 33,003 compared with 28,493 in 1952, the increased prevalence of chickenpox, whooping cough and dysentery being responsible for the rise in numbers. Chickenpox accounted for 22·3 per cent. of the notifications, whooping cough for 20 per cent., and dysentery for 8·2 per cent. Dysentery has shown a disturbing increase in recent

years. In addition to the actual number notified there must be many undetected symptomless carriers and also people who have had slight disturbance for which they did not seek advice. Heavier demands are made on hospital accommodation than the comparative mildness of the infection warrants. Although its mortality is at present very low, the housing conditions of many of its victims make hospital isolation essential; in fact, 65 per cent. of the cases were removed to hospital. The spread of this infection revealed the urgent necessity for improved standards of personal hygiene, especially in those engaged in the handling and preparation of food both in the home and elsewhere. The habit of hand-washing would go far to reduce much of the transient diarrhoeal and related illnesses which are becoming increasingly prevalent and at the same time be a useful precaution against more serious infections.

Scarlet fever, which continues to be a mild disease, was responsible for 1,912 cases, but for the first time no deaths were recorded in the city. Approximately one-third of the patients are now cared for at home, a proportion which would be even higher if the housing accommodation of the city permitted.

The number of cases of diphtheria registered was 50, a decrease of 36 from the previous year. This figure is the lowest so far recorded, and in association with the fact that there were no deaths makes it a remarkable year in the history of diphtheria in the city. If the improvement is to continue, however, immunisation must be maintained at a high level. Although the records show an increase in the number of children immunised in the under 5 age group it is unsatisfactory to report that less than half the children in this group have been protected despite both local and national propaganda, the issue of almost 10,000 Birthday letters, and the constant encouragement of health visitors and sanitary inspectors.

One can readily imagine the public outcry had diphtheria immunisation been available only to the well-to-do. But it is little encouragement to those protagonists of free preventive measures that so few avail themselves of the opportunities offered. Public apathy is not restricted to diphtheria immunisation alone. Only 17 per cent. take advantage of free infant vaccination, though Glasgow is a seaport town with an air terminal. Many contacts of open cases of tuberculosis decline to be X-rayed. Many parents ignore the opportunity of B.C.G. protection for children of school leaving age. There is also the unsatisfactory response by expectant mothers to the offers of free dental treatment and supplementary vitamins despite the fact that these provide additional safeguards to themselves and the unborn child.

Poliomyelitis (infantile paralysis) showed no increase. In all there were 69 cases, of which 31 had some degree of paralysis. Only two deaths occurred, one being an adult female aged 28 and the other a child aged 2.

The number of cases of measles registered was 4,878, of which 1,876 were under 5 years. One-fifth of the under 5 age group were treated in hospital. There were eight deaths, four under 1 year, two between 1 and 2 years, and two between 2 and 5 years.

There were 3,916 notifications of primary pneumonia and 150 of influenzal pneumonia. As in previous years, the majority of the deaths occurred at the extremes of life. No serious outbreak of influenza occurred during the year. Observations on this disease have been facilitated recently by identification of the virus in the laboratory at Ruchill Hospital.

TUBERCULOSIS.

The position regarding tuberculosis has in late years tended to evoke some expressions of doubt or even of alarm, and certainly the continued high incidence of pulmonary disease cannot be regarded as other than serious. While it is still essential to take every step to improve a situation which remains unsatisfactory, there are favourable indications which also deserve some emphasis.

Further improvements have been recorded in the quality and purity of the milk supply. No sample of milk delivered to the schools has been found to contain tubercle bacilli for the past nineteen years.

It is disappointing to have to record a higher incidence of pulmonary tuberculosis in 1953, as shown by an increase of 104 notified cases compared with 1952. It would be a mistake, however, to place a hasty interpretation on this in view of the ever increasing efforts being made both by the Hospital Authorities and by the Department to find new cases. As noted elsewhere, for example, the X-ray Unit attached to the Department, which deals with particularly vulnerable groups, completed its first full year of operation in 1953, during which over 200 cases of apparently active lung disease were detected out of 10,500 examinations made. As many of these were registered as new cases, there is good evidence that the increase in notifications is largely, if not wholly, due to more intensive efforts in case-detection. Moreover, the search is being conducted more extensively in groups not previously included in the anti-tuberculosis programme.

The good work of the special section of the home helps who volunteered to assist in the homes of cases of pulmonary tuberculosis continued and was highly appreciated by the public.

While the incidence of pulmonary tuberculosis remains a major problem, the death rate shows another substantial drop, having fallen by one-half in only three years. The non-pulmonary death rate shows an even more spectacular drop of two-thirds in the same period, and its incidence also continues downwards.

Another favourable aspect which seems to deserve some emphasis is that the small decline in non-pulmonary tuberculosis conceals a greater decline in the recorded cases of disseminated tuberculosis, which very largely consist of tuberculous meningitis. Moreover, for the first time on record, there was in 1953 no notified case of tuberculous meningitis under the age of one. Indeed, if this is at all an accurate reflex of the true position, it may be fittingly described as a milestone of achievement. It may be that cases of tuberculous meningitis did occur among infants in 1953 ; but if so they were not formally notified. It seems desirable to emphasise that notification is important and that there is still an obligation on all practitioners to notify cases of tuberculosis forthwith to the Medical Officer of Health. In brief, it should be regarded in the same light as any other infectious disease.

The rapid expansion of B.C.G. vaccination continues, and constitutes yet another heartening aspect of the problem. The success of the new scheme initiated in 1953 for school children should not obscure the fact that progress was well maintained both among contacts and also new-born infants. Indeed, it is tempting to believe that B.C.G. vaccination may have had a decisive influence in the trend of tuberculous meningitis noted. Whether or not this deduction is warranted, there is some cause for believing that the position of tuberculosis as a whole is not one that justifies an attitude of unrelieved despondency.

PORT HEALTH AUTHORITY.

During the year, 1,437 vessels from overseas and 5,919 coastal vessels arrived within the jurisdiction of the port. There were few cases of infectious disease, and it was only necessary to apply prescribed measures to one vessel. The degree of rodent infestation on foreign going vessels has been reduced, and good progress has been made in lessening the rat infestation on coastal vessels. Sodium mono-fluoroacetate, "1080" for de-ratting vessels was used experimentally for the first time. The inspection and examination of foodstuffs

under the Public Health Imported Food (Scotland) Regulations, 1937-48, have been major factors in the work of this Section during the year, and a considerable amount of time was devoted to it. The main cause was due to fire damage or holds of vessels flooded with sea-water. The value of this constant vigilance to prevent the ingress of infectious disease through the port and to ensure the purity of imported foodstuffs cannot be over-stated.

HOUSING.

During the year 347 dwellings were represented to the Housing Committee as unfit for human habitation and a further 164 houses under clearance area procedure.

The closing or demolition of the worst houses in the city proceeds slowly, and the endeavour to maintain these old derelict properties even in a state of being wind and water-tight is creating excessive demands on the Department. Many of the properties have been abandoned by the owners, because of the need for some major repair, such as the complete reslating of a roof, and only a short delay in the carrying out of such work causes rapid deterioration. Unfortunately, until the number of available houses in Glasgow is materially increased there is little prospect of getting rid of some of the worst slums, and proposals to carry out technical redevelopment in Hutchesontown, where the majority of the houses are in a reasonable condition, will postpone large-scale slum clearance for years.

Although the Housing Committee have been invited to make available some 1,000 houses each year for the rehousing of families from slum property, there is little likelihood of this number being achieved for a considerable time.

At the end of the year the Government presented to Parliament their Housing (Repairs and Rents) (Scotland) Bill, which has the intention of encouraging slum clearance by permitting Local Authorities to maintain in occupancy houses which are subject to closing and demolition orders so as to provide temporary accommodation, and to maintain existing houses by making available to the owners additional sums by way of increased rent. The tenants will have the opportunity of applying for certificates of disrepair should they be of the opinion that their houses are not in "good and tenantable repair." As the possession of such a certificate will prevent the payment of increased rent, it is likely that the Department will receive very many applications, most of which will be granted.

BACTERIOLOGICAL LABORATORY.

The work of the Corporation's Laboratory again deserves recognition for the help it has afforded in the prevention and control of disease by the application of the principles of bacteriology and immunity. A general increase in the amount of work accomplished resulted in a new record of nearly 109,000 examinations during the year. In the last quarter endemic dysentery increased considerably and added to the burden of following up cases and contacts for control purposes, for, although the disease is mild, constant check must be kept on its activities. About 12,000 examinations were made to prevent spread. Food-poisoning was more troublesome in 1953, and over 6,000 examinations were made in this connection. More food, including milk and milk products, was examined both in connection with suspected illness and simply as to fitness for consumption. More work was also done in relation to the control of tuberculosis. Diphtheria again showed a diminishing incidence. More work was done for the Port Authority to ensure the safety of incoming foodstuffs and the fitness of other merchandise. More samples of blood were examined in connection with the ante-natal supervision of expectant mothers.

It will be seen that modern ways of life owe a great deal of their security to the help given to preventive medicine and hygiene by bacteriology.

FOOD INSPECTION.

The Food and Drugs (Scotland) Bill was circulated in November, 1953. This is a measure to amend and consolidate the Scottish Statutes which protect the public against unfit food or adulterated food and drugs. In particular, it strengthens the existing law regarding food hygiene and the composition of food.

The sampling of food with a view to assessment of metallic contamination was continued during the year. Samples of ice-lollies were found to contain lead in excess, fruit juices to contain lead and tin in excess, and imported fresh apples to contain arsenious oxide in excess of the limits recommended by the Metallic Contamination Sub-Committee of the Ministry of Food.

Both medical and inspectorial staff carried out lectures and propaganda work on food hygiene during the year, not only to the public but also to groups of catering and hotel staff.

AIR PURIFICATION AND SMOKE ABATEMENT.

A notable feature of the year was the Corporation's decision to promote a smokeless zone within the centre of the city, and it was arranged to carry out the necessary preparatory work by a complete review of the area selected. The work was commenced towards the end of the year and continued into 1954. A second feature of interest was the institution of nine standard gauge collector stations in the Polmadie area in which many industrial works are situated. This area was selected because of the Corporation's decision to erect a large refuse destructor there in the near future. The extent to which the area is exposed to smoke pollution can be assessed by the fact that one station recorded 100 tons of precipitated soot, other solids and soluble matter per month, a figure which is over four times the average for the city. It is apparent that the greatest care must be taken not to increase the smoke pollution of this area which is already far too high.

GENERAL SANITATION.

The reports of the Divisional Sanitary Inspectors describe a wide and increasing range of functions. As a study of the returns shows, their work throughout the year has been hampered by a shortage of assistant sanitary inspectors. Until this severe handicap is overcome the sanitary work of the Department must of necessity suffer, with consequent lowering of the standards of health and amenity.

HEALTH EDUCATION.

The Department is a centre of Health Education. It is a training school for student health visitors and student sanitary inspectors, and conducts the practical course for the Diploma in Public Health. The staff give over 200 lectures annually to a variety of societies and organisations in order to spread the gospel of healthy living.

Visitors from all over the world visit the Department, some staying for as long as a month to study the schemes of health and welfare in operation. This year we have had visitors from the World Health Organization and British Council; medical officials and sanitary inspectors from as far afield as the United States of America, Canada, Trinidad, Palestine, Nigeria, the Gold Coast, Pakistan, India, and various European countries. Glasgow is rightly regarded as an ideal city in which to gain experience in many subjects, not least in Public Health and Sanitary Science.

WELFARE SERVICES.

The Welfare Services of Glasgow are most comprehensive and have the best possible relationship with voluntary organisations and hospital almoners. The Welfare homes rival those of any authority in Britain, and no other city has provided better segregation accommodation for youthful contacts of active pulmonary tuberculosis as part of the B.C.G. scheme.

I take this opportunity of thanking the members of the Health and Welfare Committee for their co-operation during the year. My gratitude is also extended to all members of the Health and Welfare Staff for their loyal and able service, and in particular to Miss Knox, the Department's Librarian, for her work in collecting and arranging the material of this report.

Stuart Haidland

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SECTION I.

POPULATION, Etc.

The Registrar General's estimate of the population of the City as at 31st December, 1953, was 1,085,000, a reduction on the previous year's figure of 1,800. The actual loss of population is, however, much greater than appears from a simple comparison of the population of the two years. The natural increase, the excess of births over deaths, was 7,405 in 1953 compared with 6,496 in 1952, both figures being above the pre-war average. If this number is added to the 1952 population of 1,086,800, it becomes obvious that there was, in fact, a decrease in 1953 of 9,205 persons. From information supplied by the Registrar General, it was ascertained that by the 30th June there had been a loss of population by migration overseas of 4,526, and to other parts of the United Kingdom outside Glasgow of 4,736 persons, 9,262 in all. This is borne out by the changes in the number of local government electors between 1952 and 1953, the March return showing a reduction of 8,179, later offset by the accession, in October, of 4,075 new voters.

An average of the decreases shown in the March and October returns multiplied by the ratio of population to voters obtained at the 1951 Census, resulted in a figure of 9,122, a fairly close approximation to the Registrar General's estimate of the loss by migration. An average of the populations based, one on the March and the other on the October return of voters, produced an estimate of 1,085,083, which is near enough to warrant acceptance of the Registrar General's figure.

The following table shows how this estimate was arrived at :—

Population as at December, 1952	...	...	...	1,086,800
Add Natural Increase, 1953	...	...	...	7,405
				<hr/> 1,094,205
Deduct loss from migration (based on the decrease in Voters' Roll, 1953)	...	...	...	9,122
				<hr/> 1,085,083

The Registrar General's estimate has been used for the calculation of rates throughout this report.

This annual loss of population has already been discussed in the 1951 and 1952 reports, and need not be again referred to. More important in its implications for a health and welfare department perhaps is the effect of this annual loss on the sex and age distribution of the population. It is now well known that the proportion of the population over 65 years of age has increased considerably in recent years, while that of younger ages under 15 has declined. The ratio of these two groups to the adult working population is therefore of some significance. The Department of Health in a recent Bulletin has shown this "change in dependency load" over a period of years from 1861 to 1951 for Scotland as a whole. The figures showed that "the ratio of young children to adults has appreciably fallen from a peak value of 631 per 1,000 in 1871 to 410 in 1931 and to only 376 in 1951. The ratio of old persons to adults, . . . approximately 85 per 1,000 at the beginning of the century, rose to 111 in 1931 and 152 in 1951. The *total* dependency load has diminished from 720 in 1871 to 521 in 1931 and 528 in 1951 but the nature of the load has obviously radically altered." Information in respect of Glasgow is here limited to the two most recent Census periods, 1931 and 1951, as being the most nearly comparable, and is shown in the following table :—

	Total Population	Percentage proportion of total population aged			Ratio (per 1,000) of the population aged 15-64		
		—15	15-64	65+	—15	65+	(—15) and (65+)
*1931 ...	1,093,337	27·3	67·1	5·6	407	83	490
1951 ...	1,089,767	24·8	66·6	8·6	372	129	501

(* 1931 populations are those of the City as constituted in 1951.)

It is apparent that the age constitution of the City's population as regards dependency is very much the same as for the country as a whole. When the ratios for each sex are examined, the proportion of women over sixty-five to the adult working (female) population showed a relatively greater increase between 1931 and 1951 than the similar male ratio, as follows :—

				Ratio (per 1,000) of population (of each sex) aged 15-64		
				—15	65+	(—15) and (65+)
1931—Males	...	...	...	429	76	505
Females	...	...	...	388	89	477
1951—Males	...	...	...	402	118	520
Females	...	...	...	347	139	485

Ward Population.—Details of the population in each ward of the City are given in Appendix Table I and the distribution of the population in the five administrative divisions of the City is shown in Section XII—General Sanitary Administration, page 238. Ward populations are based on the Census ratio of population to local government electors and changes in the electoral register provide as accurate an index as any of the movement of population between wards.

The drift of population from the congested older wards of the City to those where housing schemes are in progress continues. There were decreases in all but nine of the 37 wards and these nine were all wards in the outer ring of the City. The increases in these wards were as follows :—Pollokshaws (3,405), Provan (3,116), Ruchill (2,176), Cathcart (1,460), Springburn (450), Langside (387), Pollokshields (213), Knightswood (194) and Maryhill (74). Wards showing the greatest decrease were Park (931), Dalmarnock (914), Gorbals (819), Govan (711), Anderston (699), and Parkhead (614). The extent of the growth of the outer wards and the problems this growth presents will be best appreciated if it is realised that these outer wards now rival in size some well known Scottish towns. For example, Ruchill's population, 50,851, now exceeds that of Kirkcaldy (50,100); Pollokshaws with 48,613 is now a close rival to Coatbridge with 49,300; Pollokshields' 42,657 compares with Ayr's 42,400 and Kilmarnock's 42,800; and Springburn with 37,677 has now outstripped Falkirk (37,400).

Institutional Population.—On the 30th June each year a special census of persons resident in hospitals, institutions, hotels, etc., is taken by the district inspectors. Squatters are included in this return, and in 1953 their number fell from 1,311 in 1952 to 1,058. The total institutional population in 1953 was 29,365, compared with 28,380 in 1952, an increase of 985, due mainly to increases in hotel population and the opening of new nursing homes and homes for the aged. The larger institutional populations were those of Exchange (3,991) where most of the hotels are situated, and Springburn (2,458) where there are two large hospitals, Robroyston and Stobhill. Hawkhead Mental Hospital and Crookston Home accounted for more than half the institutional population in Pollokshields ward (2,393); the remainder was distributed throughout the various nursing and residential homes (for children and for elderly persons) which to an increasing extent are becoming a feature of the older part of this ward.

There were increases in the following wards :—Exchange (328), Park (324), and Pollokshields (183), due in the main to fluctuations in

the hotel and nursing home populations. The increase of 218 in Kelvin-side was contributed by a training college. The major decreases occurred in Parkhead (139) where an industrial school was demolished; in Langside (135) where a squatter camp was evacuated; and in Maryhill (126) where there was some change in the barrack population.

The institutional population as at the 30th June, 1953, was accommodated as follows :—

					1953	1952
General Hospitals	...	...	...	...	3,310	3,352
Fever Hospitals	...	...	...	...	1,505	1,604
Mental Hospitals	...	...	...	...	3,199	3,056
*Sanatoria and other Hospitals	...	...	...	...	6,780	6,375
Hotels	...	...	...	...	3,168	1,790
Common Lodging Houses	...	...	...	...	3,633	4,811
Hostels, etc.	...	...	...	...	3,007	2,614
Special Institutions (Barracks, etc.)	...	...	...	...	3,705	3,467
Squatters	...	...	...	...	1,058	1,311
					<u>29,365</u>	<u>28,380</u>

* Includes nursing homes.

Acreage.—The area of the City remains unaltered at 39,725 acres. The following table shows the progress of the City's expansion since the beginning of the Century :—

1901	...	...	12,681 acres
1911	...	...	12,975 acres
1921	...	...	19,183 acres
1931	...	...	29,511 acres
1951	...	...	39,725 acres

The 37 wards of the City vary considerably in size, from the smallest, Woodside, with 170 acres to Provan with 4,846 acres. Cowcaddens, Woodside and Gorbals are the only three wards which have remained unchanged in area throughout the various extensions to the City and alterations in ward boundaries which have taken place since the wards were first " recast " in 1920.

Density.—The average density of the City remains unchanged at 27 persons per acre. Three of the oldest wards of the City, Townhead, Gorbals and Woodside, are still the most densely populated with densities in each case of over 100, well above those of the other 34 wards. The progressive reduction in the density of these wards over the past thirty years is shown as follows :—

			Woodside	Gorbals	Townhead
1921	...	...	222	207	171
1931	...	...	195	186	156
1951	...	...	158	145	116
1952	...	...	150	139	114
1953	...	...	148	136	112

Wards with low densities were Provan (6), Cathcart (8), Knightswood (11) and Maryhill (11). In Pollokshields and Pollokshaws wards where as recently as 1949 the ward density, in both cases, was 8 persons per acre, housing schemes completed in the intervening years have increased the density to 13 and 15 persons per acre respectively. Fourteen wards in all had densities below the City average and of these only four approached it, Ruchill with 26, and Parkhead, Whiteinch and Craigton each with 25 persons per acre.

Occupied Houses.—The return of occupied houses as at Whitsunday, adjusted for inhabitant occupiers and shops used as houses, etc., is supplied by the City Assessor. The total for 1953 was 307,783, compared with 304,459 in 1952, an increase of 3,324. The distribution of these throughout the municipal wards of the City is shown in Appendix Table II and in the five administrative divisions of the City on page 239. By far the largest increase was in Provan ward where progress in the Cranhill and Ruchazie housing schemes was responsible for 1,383 additional houses. Housing schemes were also responsible for increases in Cathcart (825), Ruchill (459), Langside (420), Maryhill (355), Shettleston and Tollcross (345), and Knightswood (186). The largest decrease was 254 in Gorbals, followed by 129 in Govan, due in both instances to the demolition of older properties in these wards.

The number of occupied houses in the City, according to size, is as follows :—

			Comparison with 1952
One apartment	...	34,579	Decrease ... 56
Two apartments	...	108,245	Decrease ... 622
Three apartments	...	87,738	Increase ... 2,085
Four apartments	...	53,036	Increase ... 1,681
Five apartments and over	...	24,185	Increase ... 236
		<u>307,783</u>	Increase of ... <u>3,324</u>

Unoccupied Houses.—There were 1,891 empty houses in the City at Whitsunday, 1953, compared with 1,477 in 1952. This is an increase of 414 and the table which follows shows a rapid increase in the number of houses falling vacant since 1949. This is an anomalous situation in a City such as Glasgow where the housing shortage is still acute and is due to the now accepted practice of offering houses in tenement properties for sale whenever there is any change in the present tenancy. Twenty-seven per cent. of the total were houses of five apartments and over. In Kelvinside ward, which again had the highest number of empty houses, 210 compared with 153 in 1952, 103 were houses of this size, and in Partick (East) with 174 empty houses (45 more than in 1952), half the number were five-apartment houses. Increases in the number of houses falling empty occurred in all but nine wards, especially Langside (40), Cathcart (35), Partick West (27), Woodside (26), Dalmarnock (25) and Govanhill (23). As shown in the following table, most of the increase in 1953 was in the one-apartment houses (114) and houses of five apartments and over (112).

		NUMBER OF UNLET HOUSES				
		1953	1952	1951	1950	1949
1 Apartment ...	...	320	206	169	117	107
2 Apartments ...	...	399	347	250	142	89
3 Apartments ...	...	372	301	218	144	86
4 Apartments ...	...	288	223	154	92	59
5 Apartments and over		512	400	253	157	100
		<u>1,891</u>	<u>1,477</u>	<u>1,044</u>	<u>652</u>	<u>441</u>

Dean of Guild Linings.—During the year ended 31st August, 1953, 5,545 linings were granted, an increase of 173 on the 1952 figure. Details of the numbers and size of house for which these were granted are given in Appendix Table III, with a comparison of the figures for the preceding years from 1919. Of the total linings granted, 3,511 were for three apartments, 1,527 for four apartments, and 280 for houses of five apartments. Three linings were granted for houses of six apartments. In addition, 163 one-apartment houses and 61 two-apartment houses, for occupancy by aged couples and single persons, are to be erected, most of them in the Drumchapel and Ruchazie Schemes.

Meteorology.—Mildness was a notable feature of weather conditions in 1953 and the year was drier and duller than usual.

Apart from short periods of frost in early January and February, no prolonged cold spells were experienced and there was almost complete absence of frost in the last three months of the year.

Snow fell in late January and early February when it lay for a few days.

The mean temperature for the year was 48.6° F., 2.3° above that of 1952. This has only once been exceeded since 1939—in 1949 when the mean temperature was 49.3° F. and only once equalled, in 1945. The lowest temperature, 20° F. was recorded on three successive days early in January. Mean temperatures, with two exceptions, were above average with August the warmest month (58.5° F.), although the highest daily temperature of the year, 80° F., was recorded on 25th June. Temperatures in April (43.0° F.) and July (57.7° F.) were lower than in 1952 (47.9° F. and 59.3° F. respectively) and this was the coldest July since 1940. December (41.6° F.) was the warmest since 1942 and November (45.5° F.) the warmest since 1924.

Rainfall for the twelve months, 36.51 inches in 206 days, was less than usual, although above the 1952 figure of 35.32 inches and 195 days. The total for the first six months was exceptionally light, with a few extended dry periods, as in March, when there were 19 successive days without measureable rain and only 0.96 inches of rain in all recorded (the driest March since 1924). October also was very dry with 16 dry days and only 2.39 inches of rain. Although January and February had 17 wet days, the amount of rain recorded was less (1.43 inches and 1.38 inches) than in June with only 13 wet days but 2.57 inches of rain, 1.5 inches of which fell in half-an-hour on 26th June. November was the wettest month with 6.44 inches, of which 1.25 inches fell in one day. There were 24 wet days in both July and December but July was the wetter of the two with 5.30 inches of rain; it was also the wettest July since 1920. December had 4.73 inches of rain, 1.75 inches of which fell in one day.

Sunshine was less than normal, 1,078 hours compared with 1,280 in 1952 and less than in any other year since 1944 when only 953 hours' sunshine were recorded. April, May, June and August were all sunnier than July which had only 114.1 hours of sunshine in contrast to the 187.2 hours recorded in May. November had only 18.2 hours' sunshine and was the dullest since 1915.

Fog made an appearance in January and December but was neither dense nor persistent.

A severe storm on the 31st January caused widespread flooding and damage throughout the country.

SECTION II.

VITAL STATISTICS

The following is a summary of the principal vital statistics of the City :—

SUMMARY.

	1949	1950	1951	1952	1953
Population	1,090,260	1,090,013	1,089,767	1,086,800	1,085,000
Acreage	39,725	39,725	39,725	39,725	39,725
Persons per acre	28	28	27	27	27
Number of Inhabited Houses	296,431	299,038	301,991	304,459	307,783
Deaths—Number registered	15,248	15,043	15,250	14,676	13,586
Deaths—After correction for for Transfers	14,203	14,090	14,312	13,841	12,827
Births—Number registered	21,584	20,633	20,736	20,872	20,519
Births—After correction ...	20,923	20,031	20,091	20,337	20,232
Death rate per 1,000 living —All causes	13·03	12·93	13·13	12·74	11·82
Birth rate per 1,000 living	19·19	18·38	18·44	18·71	18·65
Deaths under One Year— After correction	1,033	879	922	831	723
Deaths under One Year— Per 1,000 births	49	44	46	41	36

Particulars of the causes of mortality together with the rates are given in Table VIII in the Appendix, and the age and sex distribution in Table IX.

BIRTHS.

There was a decrease in the number of births in 1953, 20,232 compared with 20,337 in 1952 and 20,091 in 1951. This is 503 less than the average for the preceding five years. The trend over the past twenty years is shown in the following table :—

1930-34	22,433	1950	20,031
1935-39	22,042	1951	20,091
1940-44	21,302	1952	20,337
1945-49	22,580	1953	20,232

The rate was 18·65 per 1,000 compared with 18·71 in 1952 and 18·44 in 1951. This is a higher rate than that of Scotland as a whole (17·8) and considerably above that of Edinburgh (15·4), although both these rates, in contrast to that of Glasgow, showed a slight increase in 1953. The Glasgow rate is itself exceeded by those of several other industrial areas of Clydeside where rates of over 20 per 1,000 are common.

The proportion of male births, 51·6 per cent., was unchanged from 1952, and is about the average for the previous ten years.

As in previous years, Gorbals had the highest birthrate of all the 37 wards; 28·2 per 1,000 compared with 26·6 in 1952. Sixteen of the wards had rates of over 20 per 1,000, among them Hutchesontown (25·6), Townhead (25·2), Woodside (25·2), Cowcaddens (24·8), Exchange (24·5) and Govan (23·8). Wards whose rates were about the average for the City were Fairfield (18·4) and Parkhead (18·0). The lowest rate was that of Yoker (11·5). Other wards with low rates were Craigton (11·9), Camphill (12·1), Kelvinside (12·1), Langside (12·9) and Cathcart (12·9).

Reference has been made in previous reports to the excess of deaths over births each year in the four wards, Camphill, Cathcart, Langside and Kelvinside. In 1953, however, Langside, the first time for several years, showed a small excess of births over deaths. In the other three wards the position is unchanged and was as follows:—

		1953		Decrease		
		Births	Deaths	1953	1952	(1948-51)
Camphill	...	262	333	71	96	246
Cathcart	...	294	335	41	26	151
Kelvinside	...	225	276	51	71	104

Illegitimate Births.—During 1953, 1,019 births were registered compared with 959 in 1952. This is 5·0 per cent. of the total births, an increase of 0·3 in the 1952 figure. The number of illegitimate births in each municipal ward and the respective percentage of the total births are given in Appendix Table V. The highest ward rates were those of Park (9·2), Gorbals (8·7), Calton (7·7), Townhead (6·4) and Exchange (6·4). All but that of Exchange showed a considerable increase from the previous year. The lowest rate was that of Fairfield (1·9) where the number of births *and* the rate remained unchanged from 1952. Other wards with low rates were Cathcart (2·0), Craigton (2·4) and Pollokshields (2·6).

A more accurate comparison of the legitimate and illegitimate birth-rates is obtained when the calculation is based on the number of women of child-bearing ages; the former on married women of 16 to 44 years of age, and the latter on the unmarried women and widows of the same ages. This is given in the following tables :—

GLASGOW.—BIRTH-RATES, DISTINGUISHING LEGITIMATE AND ILLEGITIMATE IN CERTAIN YEARS FROM 1871.

(Based on figures of Registrar-General)

Year	Number of Legitimate Births	Rate per 1,000 Married Women 16-44 years	Number of Illegitimate Births	Rate per 1,000 Unmarried Women and Widows 16-44 years
1871	17,118	298	1,749	27
1881	17,605	293	1,501	22
1891	18,304	283	1,553	21
1901	22,676	260	1,530	14
1911	19,966	229	1,603	14
1921	27,790	238	1,922	13
1931	21,504	176	1,427	10
1951	19,029	134	1,062	10
1952	19,378	137	959	9
1953	19,213	135	1,019	10

MARRIAGES.

There was an increase in the number of marriages in 1953—10,512 compared with 10,281 in 1952 and 10,491 in 1951. This represents a rate of 9·7 per thousand of the population as against 9·5 for the previous year. The following table shows the trend of the marriage rate since 1871 :—

MARRIAGES PER THOUSAND PERSONS LIVING.

1871-1880	9·1	1946	10·3
1881-1890	9·3	1947	10·0
1891-1900	9·4	1948	10·0
1901-1910	8·8	1949	9·5
1911-1920	9·7	1950	9·1
1921-1930	8·9	1951	9·6
1931-1940	9·7	1952	9·5
1941-1945	11·0	1953	9·7

DEATHS.

The number of deaths registered in the City during the year was 13,586, but after adjustment for inward and outward transfers, the figure was reduced to 12,827, which represents a substantial decrease of 1,014 from the similarly corrected figure for 1952. The death-rate, 11·82, is therefore the lowest rate yet recorded for the City. The rate for Scotland was 11·5 compared with 12·0 in 1952.

The following table shows the trend of the City death-rate from 1881 to date :—

GLASGOW—ALL CAUSES—DEATH-RATE PER 1,000 LIVING.

1881-1890	...	...	24·22	1936-1940	...	...	14·75
1891-1900	...	...	21·53	1941-1945	...	...	13·62
1901-1910	...	...	19·56	1946-1950	...	...	13·15
1911-1920	...	...	16·36	1951	...	...	13·13
1921-1925	...	...	15·49	1952	...	...	12·74
1926-1930	...	...	15·04	1953	...	...	11·82
1931-1935	...	...	14·17				

Camphill, for the fourth year in succession, had the highest death-rate of all the 37 wards, 15·4 (compared with 17·0 in 1952 and 16·2 in 1951). This ward has consistently shown an excess of deaths over births for several years past and as shown by the 1951 Census was only exceeded by Kelvinside Ward in having a higher proportion of persons over 65 and relatively fewer women of child-bearing age than other wards of the City. Other wards with high death-rates were Kelvinside (14·9), Cathcart (14·7), Park (14·6), Exchange (14·5) and Dennistoun (14·1). Other nine wards had rates above the City average and Cowlairst had an almost similar rate of 11·84. Pollokshaws for the third year in succession had the lowest rate of all the wards, 7·8 (compared with 8·0 in 1952 and 9·4 in 1951). Other wards with low rates were Pollokshields (9·2), Ruchill (9·3) and Springburn (9·7).

Age and Sex Distribution.—The proportion of female deaths, which had risen slightly in 1952, reverted in 1953 to the 1951 figure of 47 per cent. There is little variation in this figure from year to year.

Details of the age and sex distribution of deaths according to the International Classification of Causes of Deaths (Short List) are given in Appendix Table IX.

RATE PER 1,000 DEATHS AT ALL AGES.

Year			—1 Year	—5 Years	—15 Years	—20 Years	—25 Years	—65 Years	65— Years	All Ages
1932	...	...	158	65	32	21	25	371	328	1,000
1942	...	...	127	29	23	24	24	369	404	1,000
1949	...	...	73	14	13	12	21	357	510	1,000
1950	...	...	62	14	8	9	16	361	530	1,000
1951	...	...	65	12	9	6	10	347	550	1,000
1952	...	...	60	10	7	7	9	340	567	1,000
1953	...	...	57	9	9	6	7	343	569	1,000

Deaths in the age-group over 55 years were again fewer, 4,956 males and 4,583 females compared with 5,274 and 5,021 respectively in 1952. The proportion of deaths at all ages was somewhat less for males in 1953, 72·4 (compared with 73·2 in 1952) and greater for females, 76·7 (compared with 75·7 in 1952).

Relative Frequency of Causes of Deaths.—A comparison is made in the following table of the commonest causes or groups of causes of death which together were responsible for over 78·83 per cent. of all deaths in 1953 and 78·6 per cent. in 1952 :—

			1953		1952	
			Number	Per cent. of all Causes	Number	Per cent. of all Causes
Heart Disease	...	...	3,517	27·42	3,800	27·45
Malignant Neoplasms	...	...	2,228	17·37	2,233	16·13
Vascular Lesions of the Central Nervous System	...	...	1,734	13·52	1,904	13·76
Bronchitis	...	...	627	4·89	690	4·99
Violence (Suicide, Road Traffic Accidents, etc.)	...	...	598	4·66	588	4·25
Congenital Malformations and Diseases of Early Infancy	...	...	508	3·96	555	4·01
Pulmonary Tuberculosis	...	...	471	3·67	571	4·13
Pneumonia	...	...	428	3·34	532	3·84
			<u>10,111</u>	<u>78·83</u>	<u>10,873</u>	<u>78·56</u>

As shown above Congenital Malformations and Diseases of Early Infancy has now taken precedence of Pulmonary Tuberculosis which in 1952 was sixth on the list.

A similar analysis of the Causes of Death for Scotland as a whole in 1953 shows Violence as fourth in order of importance, followed by Congenital Malformations and Diseases of Early Infancy, Bronchitis, Pneumonia and Tuberculosis (all forms) in that order. The first three causes were as shown above, and together these eight causes accounted for 76.39 per cent. of the total deaths.

Causes of Death.—The following table is a summary of the causes of death as shown in Appendix Table VIII, arranged in the principal groups according to the International Classification adopted in 1950.

SUMMARY OF DEATH RATES PER MILLION FROM PRINCIPAL CAUSES.

	1951	1952	1953
General Diseases—			
(a) Infectious	124	92	77
(b) Tuberculosis—			
(1) Respiratory	637	525	434
(2) Non-Respiratory	90	66	40
(c) Malignant (Cancer, etc.)	2,002	2,055	2,053
Diseases of the Nervous System (including Mental Disorders)	1,918	1,958	1,789
Diseases of the Circulatory System	4,156	4,027	3,907
Diseases of Respiratory System (including Influenza)	1,440	1,357	1,138
Diseases of Digestive System	405	378	352
Congenital Defects and Diseases of Early Infancy	550	511	468
Violence	520	541	552
All Other Causes	1,291	1,226	1,012
	<u>13,133</u>	<u>12,736</u>	<u>11,822</u>

Mortality from Infectious Disease declined still further in 1953, the rate falling from 124 in 1951 and 92 in 1952 to 77. As in 1952 more than half the deaths in this group were due to diarrhoea and enteritis (under 2 years of age), though the rate for this cause, 41 per million, is less than in that year when it was 53.

Whooping-cough was very much more prevalent during the year and there were accordingly more deaths, 15 compared with 3 in 1952. There were 8 deaths from measles, all of them children under 5 years of age, and four of these less than 9 months old. There were no deaths from either scarlet fever or diphtheria. Deaths from meningococcal meningitis numbered 12, two more than in 1952, and there were two deaths from poliomyelitis, an adult male under 25 years and a female child under five. There were only two deaths from acute infectious encephalitis compared with 14 in 1952 and 22 in 1951.

Tuberculosis.—There was a further decrease in deaths from pulmonary tuberculosis during 1953, 471 compared with 571 in 1952 and 694 in 1951. The mortality rate was 434 per million, the lowest rate so far recorded, and already less than half the rate for 1950 (874). There has been a steady decline in the rate since 1949 when it was as high as 1028. The following table shows the age distribution of the deaths from pulmonary tuberculosis (stated as a percentage of the total).

		—15	—20	—25	—35	—45	—55	—65	65+	All Ages
MALES—										
1953	...	1.3	0.6	3.9	12.1	13.0	22.8	29.0	17.3	100.0
1952	...	3.8	0.3	4.4	12.3	17.3	21.7	21.7	18.5	100.0
1951	...	2.1	2.8	5.8	13.1	16.1	20.7	24.9	14.5	100.0
1950	...	4.1	3.0	8.5	14.6	18.2	21.9	18.7	11.0	100.0
FEMALES—										
1953	...	3.6	7.9	11.0	25.0	22.6	12.2	10.4	7.3	100.0
1952	...	5.7	7.8	16.1	26.1	20.4	9.6	9.1	5.2	100.0
1951	...	5.7	9.0	18.1	23.0	18.5	9.1	8.7	7.9	100.0
1950	...	4.5	9.9	22.2	32.5	15.5	6.9	5.1	3.4	100.0

This sex difference in the age distribution of mortality from the pulmonary form of the disease is even more strikingly shown in the following table in which the rates for each sex and age-group are based on the respective Census populations :—

PULMONARY TUBERCULOSIS :										
RATES PER 1,000 POPULATION IN EACH AGE GROUP.										
		—15	—20	—25	—35	—45	—55	—65	65+	All Ages
MALES—										
1930-32	...	0.17	0.95	1.35	1.22	1.54	1.59	1.21	0.76	0.96
1950-52	...	0.10	0.24	0.73	0.74	0.95	1.36	2.02	1.49	0.82
FEMALES—										
1930-32	...	0.26	1.47	1.41	1.11	0.79	0.62	0.60	0.23	0.75
1950-52	...	0.12	0.67	1.40	1.08	0.66	0.35	0.39	0.30	0.55

While on the whole the rates for 1950-52 showed some improvement in the mortality of both sexes from this form of tuberculosis, the table reveals a striking difference between them in the age-group 55 to 64. In this age-group the mortality for males is almost double what it was in the earlier period 1930-32 in contrast to a reduction from 0.60 to 0.39 in the female rate. Mortality among females aged 65 years and over has also risen slightly but not to the same extent as that for males, which in this age-group too is double the 1930-32 rate.

The death-rate from non-pulmonary tuberculosis also continues to fall and in 1953 was 40 per million compared with 66 in 1952 and 90 in 1951. There were 14 deaths from tubercular meningitis, 7 of them children under 5 years of age. Abdominal tuberculosis accounted for only 4 deaths and 25 deaths were attributed to other tuberculous disease compared with 33 last year.

Diseases of the Nervous System.—Deaths in this group showed a steady increase from 1950 up till 1953 but during this year there has been some reduction, 187 less than in 1952. The rate fell from 1,958 in 1952 to 1,789 in 1953. Vascular lesions, which now rank third on the list of major causes of death were responsible for 1,734 or 89 per cent. of the 1,941 deaths in this group. Deaths from non-meningococcal meningitis were less than half the number in 1952, 7 compared with 18. Certain mental diseases allotted to this group accounted for 29 deaths in 1953 as against 34 in 1952. There were 171 deaths from a variety of other nervous diseases compared with 172 in 1952.

Diseases of the Circulatory System.—There were 4,239 deaths in this group in 1953, 137 less than in 1952, but in relation to all other diseases, this figure was somewhat higher than 1952, 33 per cent. of all deaths compared with 32 per cent. Deaths from arteriosclerotic and degenerative heart disease formed 72 per cent. of the deaths in this group as against 75 per cent. in 1952, with 3,075 deaths compared with 3,352 in 1952. The proportion of these deaths classified as coronary thrombosis, 44 per cent. in 1952, increased to 47 per cent. in 1953 and deaths from this form of circulatory disease numbered 1,458. There were 14 deaths from angina pectoris. Deaths from chronic rheumatic heart disease decreased from 251 in 1952 to 236 in 1953 and only one was under 15 years of age. Deaths from hypertension numbered 350 compared with 315 in 1952, and those due to Other Diseases of the Heart, 206 as against 197. Three hundred and seventy-two deaths were due to a variety of circulatory disorders now shown in the Short List as Other Diseases of the Circulatory System. This is an increase of 111 on the 1952 figure of 261.

Diseases of the Digestive System.—There was a slight decrease in the death-rate from this group of causes, 352 compared with 378 in 1952. About one-third of the 382 deaths were due to ulceration of the stomach and duodenum and the rate, 112, is the lowest for the past four years. Mortality from appendicitis continues to decline and in 1953 was 18 compared with 21 in 1952 and 25 in 1951. Deaths from gastritis and duodenitis numbered 6, as in 1952 also and the rate for enteritis and colitis (over two years of age) also remained low and unchanged from 1952 at 26 per million. Mortality from cirrhosis of the liver also continued to fall, from 41 in 1951 and 35 in 1952 to 29 in 1953.

Intestinal obstruction and hernia was responsible for 21 per cent. of all deaths in this group, 81 deaths in 1953 compared with 95 in 1952 and the rate, which has steadily increased over the past three years to 87 in 1952, fell again in 1953 to 75. Ninety-three deaths were due to other digestive diseases.

Deaths from Violence.—As shown in the table on page 34, illustrating the relative frequency of causes of death, violence is to an increasing extent becoming one of the major causes of death and in 1953 caused more deaths than all forms of tuberculosis together. The rate continues to rise and in 1953 was 552 compared with 541 in 1952 and 520 in 1951. The age and sex distribution of the deaths for the past nine years are shown in the following table :—

Year	MALES					FEMALES				
	—5	—15	—45	+45	Total	—5	—15	—45	+45	Total
1945	37	67	77	179	360	25	19	24	125	193
1946	29	43	81	201	354	28	10	28	133	199
1947	47	39	91	187	364	21	13	24	130	188
1948	38	36	96	175	345	24	10	26	139	199
1949	44	40	101	152	337	29	14	35	132	210
1950	40	23	92	181	336	19	13	20	161	213
1951	37	38	83	180	338	32	9	29	159	229
1952	44	32	88	195	359	33	7	23	166	229
1953	49	38	88	207	382	30	16	29	141	216

Reference is made in the Maternity and Child Welfare Section of this report to the high proportion of deaths in children aged 1-5 years, due to accidents in the home. From a recent report of the Registrar General, it appears that no less than 62 per cent. of all the fatal accidents

occur in the home, the proportion of accidental deaths among females (85 per cent.) being very much greater than among males (44 per cent.). At ages over 65, domestic accidents are decidedly more frequent than non-domestic even in males, while in elderly females domestic accidents are about 10 times as frequent as those originating outside the home. These figures, of course, refer to Scotland as a whole and although similar information has not yet been taken out for Glasgow, there is no reason to think that the pattern of mortality will be materially different. In 1953, 27 per cent. of all male deaths from violent causes, in Glasgow, were over 65 years of age and 48 per cent. of female deaths were in this age-group. The respective figures for 1952 were 26 and 53 per cent.

Cancer.—Deaths attributed to malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues, numbered 2,228, only five less than the 1952 figure of 2,233, with consequently little change in the rate, 2,053 in 1953 compared with 2,055 in 1952. Cancer ranks second as a major cause of death and was responsible for over 17 per cent. of all deaths in 1953. The proportion of male to female deaths from this disease has shown a steady increase since 1941 and in 1953 had increased still further to 129.

RATIO : MALES TO 100 FEMALES.

1931	...	...	97
1941	...	...	103
1951	...	...	113
1952	...	...	121
1953	...	...	129

As shown in the table on page 42, there is a sharp rise in the deaths of both sexes from 45 years upwards, with the heaviest mortality between the ages of 55 to 75. Over 75 years there is an almost equally abrupt decline, to a figure which in 1953 was almost identical for each sex. In males, 75·7 per cent. of all the deaths occur between the ages of 45 and 75 and 15·5 over 75. For females the respective figures are 70·1 and 20·1. The following table shows the age distribution of the deaths (stated as a percentage of the total deaths for each sex) :—

1953		—15	—25	—35	—45	—55	—65	—75	75+	Total	
Males	0·9	0·9	1·6	5·5	16·5	27·0	32·1	15·5	100·0
Females		...	0·6	0·3	2·1	6·8	15·6	24·7	29·8	20·1	100·0

In the Annual Report for 1952 the specific death-rates for each sex and age-group for two periods 1930-32 and 1950-52 were compared. The increase in male mortality was most marked and while common to all the age-groups was especially so at ages 55 to 64 and 75 +. This increase was in sharp contrast to a decreased mortality among females at ages between 45 and 75. Increases in the other age-groups were relatively small compared with those among males.

Most of this increase in male mortality was shown to be due to cancer of the respiratory organs, the increase in which in recent years was discussed in the Annual Report for 1951. This trend still persists. In 1953, 486 of the 570 deaths from this form of cancer were males—65 more than in 1952. The increase is even more significant when compared with the trend shown by the next most common site of the disease, the digestive organs and peritoneum, as follows :—

		1932/41	1942/51	1952	1953
MALES—					
Respiratory Organs	...	96	244	421	486
Digestive Organs	...	491	554	522	496
FEMALES—					
Respiratory Organs	...	38	69	73	84
Digestive Organs	...	429	473	468	459

Almost half the deaths in each sex from cancer of the digestive organs were located in the stomach and small intestine and the increase, 411 in 1953 compared with 383 in 1952, was wholly due to a rise in the female deaths (203 compared with 176 in 1952). In 1952 the ratio for females was only a third. This figure, 203, has only once been approached in the past twenty years when 204 deaths were recorded in 1950. The deaths from cancer of this site are compared, as follows, with the average for each of the two preceding ten-year periods :—

DEATHS FROM CANCER OF THE STOMACH AND INTESTINE.

				1932/41	1942/51	1952	1953
Males	...	...	...	190	219	207	208
Females	...	...	...	161	179	176	203

There were 122 deaths from cancer of the rectum (81 males and 41 females) compared with 133 (86 males and 47 females) in the previous year. Deaths from cancer of the pancreas were also fewer, 67 compared with 82. The reduction in cancer of the liver and biliary passages, 35 in 1953 as against 51 in 1952, was almost entirely due to a decrease

in the female deaths (16 compared with 34 in 1952). There was a decrease of 21 in the deaths from cancer of the oesophagus, 54 compared with 75 in 1952. Cancer of the breast, the second most common site of the disease in females, was responsible for 162 deaths, compared with 169 in 1952. This is still above the averages for the two preceding ten-year periods, 1932/41 and 1942/51, which were 136 and 155 respectively. There was one male death from cancer of the breast as against 2 in 1952. This year the table on page 42 has been extended to show the deaths from lymphatic and haemopoietic tissues, formerly included in the miscellaneous group, "Other and Unspecified Organs". There were 87 deaths (49 males and 38 females) from this form of cancer in 1953.

Details of the age and sex distribution of cancer with respect to the site of the disease are given in the table on the following page. The totals, for both sexes, for certain earlier years, are shown for comparison.

Transfer Deaths.—Deaths occurring in the City and transferred to other authorities numbered 1,503 and inward transfers 744, compared with the respective figures of 1,545 and 710 for the previous year. Details are given in Appendix Table VII.

GLASGOW, 1953—DEATHS FROM CANCER IN THE DIFFERENT SITES AS GIVEN IN THE INTERNATIONAL LIST OF CAUSES OF DEATH.

SITE OF LESION	MALES										FEMALES										BOTH SEXES	Both Sexes			
																						1953	All ages		
	-15	-25	-35	-45	-55	-65	-75	75+	Total	-15	-25	-35	-45	-55	-65	-75	75+	Total	1952	1942			1932		
Buccal Cavity and Pharynx	1	1	—	1	1	4	16	13	37	—	—	—	1	2	3	4	2	12	49	67	77	79			
Digestive Organs and Peritoneum—																									
(a) Oesophagus ...	—	—	—	1	3	6	16	6	32	—	—	—	1	4	3	8	6	22	54	75	45	69			
(b) Stomach and small Intestine including Duodenum ...	—	—	2	10	31	53	77	35	208	—	—	3	3	25	42	78	52	203	411	383	371	334			
(c) Rectum	—	—	2	2	5	13	32	27	81	—	—	1	3	8	10	10	9	41	122	133	127	94			
(d) Liver and Biliary Passage	—	1	—	—	3	3	9	3	19	—	—	—	—	1	5	6	4	16	35	51	71	111			
(e) Pancreas	—	—	—	3	4	6	12	11	36	—	—	—	2	5	4	16	4	31	67	82	73	36			
(f) Peritoneum ...	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	1	1	3	4	3	11	5			
(g) Other Digestive Organs	—	—	—	4	12	30	42	31	119	—	—	1	10	17	25	46	44	143	262	263	310	245			
Respiratory Organs ...	—	2	4	39	121	173	122	25	486	—	1	2	6	17	26	17	15	84	570	494	221	94			
Uterus	—	—	—	—	—	—	—	—	—	—	—	5	13	16	36	21	16	107	107	101	122	95			
Other Female Genital Organs	—	—	—	—	—	—	—	—	—	—	—	1	5	10	10	7	6	39	39	49	29	27			
Breast	—	—	—	—	—	1	—	—	1	—	—	4	11	34	45	45	23	162	163	171	143	123			
Male Genito-Urinary Organs	—	1	3	—	—	8	34	19	65	—	—	—	—	—	—	—	—	—	65	65	46	57			
Skin	—	—	—	1	3	3	3	4	14	—	—	—	1	1	3	2	1	8	22	17	33	15			
Lymphatic and Haematopoietic Tissues ...	5	4	6	5	7	8	12	2	49	4	2	2	5	5	7	10	3	38	87	279	172	112			
Other or Unspecified Organs	5	2	3	3	17	32	29	18	109	2	—	1	5	7	20	18	9	62	171	—	—	—			
Totals	11	11	20	69	208	340	404	194	1,257	6	3	20	66	152	240	289	195	971	2,228	2,233	1,851	1,496			

SECTION III.

MATERNITY AND CHILD WELFARE.

The year has been one of continued endeavour by the Maternity and Child Welfare Department in the field of maternal and child health. It is gratifying that the infant mortality rate fell to 36 from 41 in 1952 and is the lowest rate ever recorded for Glasgow. Deaths during the neonatal period and particularly from prematurity are now the major cause of infant death and account for more than half of the total infant mortality rate. There was no reduction of the stillbirth rate which was again 27. Many of the neonatal deaths and the stillbirths were preventable and it is evident that progress lies in better obstetric care for the expectant mother and on improving her education. Accordingly, it is disappointing that again during 1953 there has been a decrease in attendances at the local health authority ante-natal clinics. Every effort has been made to secure the co-operation of the general practitioners in advising expectant mothers to attend the mothercraft classes held at each centre, but the response has been very poor: It had been hoped too that the establishment of the sessions attended by consultants from the various hospitals would result in a much closer co-operation between the ante-natal clinic service and the general practitioners. The latter have been asked to send patients to these specialist sessions instead of to the hospital out-patient department. During 1953 the consultants examined 2,479 expectant mothers at these special sessions but only 150 of these were referred by general practitioners.

The attendances at the post-natal clinics however show a gratifying increase—1,372 mothers were examined compared to 758 in 1952. This number is still a small proportion of the potential number of nursing mothers who should attend the clinic and much education is still required to convince mothers of the necessity for thorough post-natal supervision.

The number of infant deaths between one month and one year decreased during 1953. Only one death from tuberculosis occurred compared with 14 in the previous year. It is legitimate to speculate whether this change is not in some measure due to the scheme for B.C.G. vaccination of newborn infants. It is disappointing to record that 9 infants died of whooping cough—all being less than 5 months of age. A disturbing feature which is related to standards of child care

is the number of deaths in the violent cause group, 58 in number. More than half were due to asphyxia following the inhalation of vomit or the regurgitation of food, and 23 from suffocation by pillows, bed covers or overlaying. These facts disclose ignorance and carelessness on the part of many parents and emphasise the continued need of the educative work of the maternity and child welfare services.

The mortality rate in the age group one to five years is again lower. Only 118 deaths occurred compared to 140 in 1952. The three major causes at these ages are accidents, congenital malformations and tuberculosis.

The home nursing service is playing an increasingly important part in the treatment of tuberculosis. Home treatment by streptomycin and other drugs is now possible in a considerable number of cases and the home nurses treated 810 tubercular cases compared to 315 in 1952. Their visits to these cases rose in number from 10,138 to 23,219.

Extension of the educational work at both ante-natal and child welfare sessions has taken place. The teaching of groups of mothers by health visitors and medical officers has been extended. As is customary many members of staff were asked to address various meetings throughout the year—guilds, mothers' clubs, etc.—and help has often been given to the Girl Guides, Girls' Training Corps and the British Red Cross Association, in their schemes of training for young girls in child care.

INFANT MORTALITY.

There was a further decrease in the number of deaths of children under 1 year of age in 1953, 723 compared with 831 in 1952 and 922 in 1951. The rate, 36, is now only a third of what it was only twenty years ago.

Mortality is still heavier among male infants, the rate in 1953 being 40·2 as compared with 43·7 in 1952. This shows a much smaller reduction than that of female infants, where the comparable rates were 30·9 in 1953 and 37·7 in 1952.

The following table shows the trend in infant mortality over the past thirty years :—

1925-29	...	...	105	1945-49	...	...	64
1930-34	...	...	102	1950	...	...	44
1935-39	...	...	93	1951	...	...	46
1940-44	...	...	95	1952	...	...	41
			1953	...	...	...	36

The rate for Scotland was 31, the lowest yet recorded.

Infant Mortality in Municipal Wards.—The deaths under one year and the infant mortality rates for 1953 and 1952 for each ward of the City are shown in the Appendix Table X.

The highest rate was 51 in Mile-End, followed by 50 in Govan, 48 in both Provan and Anderston, 46 in Springburn and 45 in Whiteinch. Sixteen wards had rates above the City average and only three, Dennistoun, Park and Gorbals, had the same rate as the City. Kelvin-side had the lowest rate of all the 37 wards, 13 (compared with 19 in 1952). Other wards with low rates were Cathcart (17), Langside (19), and North Kelvin (19).

Details of the cause of death for each sex and each quarter of the first year of life are given in Appendix Table XI. The information there given is summarised in the following statement which compares the rate for this and preceding years :—

MALES—			Rate per 1,000 Births				
<i>Causes of Death</i>			1941-45	1946-50	1951	1952	1953
I and II.	Immaturity	...	42.3	33.2	30.6	26.9	26.9
III.	Diseases of Respiratory System	... ..	17.6	10.7	6.2	5.4	4.8
IV.	Diseases of Digestive System	... ..	24.2	14.5	3.8	4.3	2.4
V.	Diseases of Nervous System	... ..	5.5	2.6	1.3	0.9	0.4
VI.	Tuberculous Diseases	...	1.3	1.0	0.3	0.6	—
VII.	Infectious Diseases	...	4.0	1.3	1.4	0.6	0.4
VIII to XI.	All other causes		4.9	3.8	5.5	5.0	5.3
All causes			99.8	67.1	49.1	43.7	40.2

FEMALES—			Rate per 1,000 Births				
<i>Causes of Death</i>			1941-45	1946-50	1951	1952	1953
I and II.	Immaturity	...	34·5	26·5	26·0	24·9	19·2
III.	Diseases of Respiratory Systems	... ..	14·0	7·8	5·3	4·4	2·8
IV.	Diseases of Digestive System	... ..	16·1	10·0	2·7	2·2	2·4
V.	Diseases of Nervous System	... ..	4·5	1·9	1·0	0·9	0·2
VI.	Tuberculous Diseases	...	1·3	0·9	0·3	0·8	0·1
VII.	Infectious Diseases	...	4·2	1·5	1·2	0·5	1·4
VIII to XI. All other causes			3·3	3·3	6·0	4·0	4·8
All causes			77·9	51·9	42·5	37·7	30·9
Ratio—Males to 100 Females			128	129	115	116	130

Mortality from respiratory disease was again reduced in 1953 when there were 50 male and 27 female deaths in this group compared with 57 and 43 respectively in 1952. Of these 38 male and 21 female deaths were due to pneumonia, 7 male and 4 female to bronchitis, 1 male to influenza and 4 male and 2 female to "Other Respiratory Diseases". Mortality from this group of diseases is now only one fifth of what it was in the decade 1931/40.

For the third year in succession mortality from the Diseases of Digestive System has been low, though the male rate has shown more variation than the female which has remained fairly steady around 2 per 1,000. In 1953 there were 25 male and 24 female deaths of which 23 and 21 respectively were due to diarrhoea.

The rate for Nervous Diseases remained low, 0.4 for males and 0.2 for females, compared with 0.9 for each sex in 1952.

There was only one death from tuberculosis, compared with 14 in 1952, and in this instance, the pulmonary form was the cause of death in a female infant under six months.

Infectious Disease was responsible for 19 deaths in all, 5 males and 14 females, compared with 6 and 5 respectively in 1952. Of these 4 were from Measles, 9 from Whooping Cough and 6 from Cerebrospinal fever.

There were 58 deaths in the Violent Causes group, an increase of 12 from the previous year, and more than half (31) were due to Asphyxia following the inhalation of vomit or regurgitation of food. Twenty three were due to Asphyxia from other causes, e.g., suffocation by pillows, bedcovers, overlaying.

The major cause of death in children under one year is Immaturity which, since 1948, has been responsible for more than half the deaths in this age group. The rate for males remained unchanged in 1953, 26.9, but the female rate fell from 24.9 in 1952 to 19.2 in 1953. The rate for both sexes together was 23.2.

Neonatal Mortality.—The neonatal rate was 22 per 1,000 births compared with 24 in 1952. The rate for males was 26.23 (24.48 in 1952) and for females 17.88, the lowest rate so far recorded. In 1952 the rate for females was 23.68. The rate for Scotland fell from 22 in 1952 to a new low record of 19 in 1953. Mortality in the first four weeks of life is almost entirely due to the Immaturity group of causes of death.

The rates for the past four years of the four chief causes of death in this age group are compared with the rate for the preceding ten-year period, 1939-1948, as follows :—

				1939-1948	1950	1951	1952	1953
Premature Birth	M.			19.18	6.70	7.24	5.91	5.55
	F.			15.80	5.22	5.96	5.69	3.99
Atelectasis	M.			2.35	5.65	5.41	5.33	5.74
	F.			1.75	3.44	4.31	4.78	4.29
Injury at Birth	M.			4.01	6.03	5.12	4.00	4.79
	F.			2.80	4.07	4.00	4.07	2.66
Congenital Malformations ...	M.			3.55	2.97	3.19	3.52	3.83
	F.			3.44	3.23	2.98	3.96	3.47

ANALYSIS OF INFANT DEATHS.

The number of deaths of children under one year again shows a satisfactory fall, there being 723 against 831 in 1952. Of these 70 per cent. occurred during the first month of life. The main causes of death again were prematurity as such or associated with some other condition and congenital malformation. An analysis was made of all infant deaths. There was a total of 723 but no information was available in 20, so that 703 fell to be analysed. The commonest causes of death were as follows :—

Prematurity (unqualified)	...	...	109	=	15.5 per cent.
Prematurity associated with some other cause	...	...	96	=	13.6 per cent.
Congenital abnormality	...	...	107	=	15.2 per cent.
Bronchopneumonia	...	...	70	=	9.9 per cent.
Accidental asphyxia	...	...	51	=	7.5 per cent.
Gastroenteritis	...	...	49	=	6.7 per cent.
Cerebral haemorrhage	...	...	38	=	5.2 per cent.
Convulsions	...	...	32	=	4.4 per cent.
Atelectasis	...	...	21	=	2.9 per cent.
Rh. factor	...	...	21	=	2.9 per cent.

There was a fall in the number of deaths from gastroenteritis—49 compared with 63 in 1952, but investigation again revealed the low incidence of breast feeding. Of these 49 cases, 44 were artificially fed. Indeed only 9.2 per cent. of all the cases were breast fed.

The greater number of cases of accidental asphyxia is a distressing feature—51 compared with 38 in 1952. The causes—overlaying and regurgitation of vomited material into the respiratory passages—emphasise again the need for continued efforts in the teaching of mothercraft.

Of all the deaths, 370 occurred during the first week of life.

The ante-natal care in these cases was as follows :—

General Practitioner	...	...	...	...	188
Hospital Clinic	...	...	...	...	97
Corporation Clinic	...	...	...	...	76
No ante-natal care	...	...	...	...	9
					<u>370</u>

There were 258 of this group born in hospital or nursing home and the remaining 112 in their own homes.

The cause of death in this group was as follows :—

	Institution	Domiciliary
Prematurity (unqualified)	68	34
Prematurity associated with some other cause	74	17
Congenital abnormality	36	20
Asphyxia	20	9
Cerebral haemorrhage	23	9
Rh. factor	14	2
Atelectasis	11	10
Meningitis	1	0
Respiratory Infection	5	2
Haemorrhagic disease of newborn ...	5	1
Congenital debility	1	7
Cause unknown	0	1
		<u>258</u>
		<u>112</u>

The infant deaths, arranged according to the social class of the father were as follows :—

1. High ranks of business and professional life ...	1.6 per cent.
2. Retail trades, clerks, teachers, etc., farmers ...	0.65 per cent.
3. Skilled labour	3.1 per cent.
4. Neither artisan nor wholly unskilled, farm labourers	3.07 per cent.
5. Unskilled labour	4.4 per cent.

Illegitimate Mortality.—There was some improvement in the mortality of illegitimate infants during 1953. There were 56 deaths among the 1,019 births, equivalent to an infant mortality rate of 54·95 per 1,000 illegitimate births. The rate for 1952 was 58·18 and for 1951 57·5. This may be compared with 667 deaths among 19,213 legitimate births and a rate of 34·72. In 1952 the legitimate mortality rate was 40·15.

Stillbirths.—The number of stillbirths registered in the City during the year was 599 compared with 635 in 1952 and 646 in 1951. There were 71 outward transfers and 23 inward transfers so that the net total for the City was 551 against 572 and 580 respectively. The rate per 1,000 live and stillbirths remains as in 1952, at 27. From information obtained under the Notification of Births Act it appears that 18 per 1,000 of all births attended at home by doctors were stillbirths and of those attended in institutions and nursing homes, 33 per 1,000. Among non-medically attended births the corresponding rate was 12. These rates show little variation from year to year.

A complete analysis of the 551 stillbirths was made. In 18 cases, no information was available, so that 533 fell to be investigated.

Ante-Natal Supervision.

General practitioner	...	...	244
Hospital clinic	...	...	159
Corporation clinic	...	...	116
None	...	...	14
			<hr/> 533 <hr/>

Attendance at Confinement.

Hospital	...	...	393	} 416 in institutions
Nursing home	...	...	23	
General practitioner	...	...	9	} 117—domiciliary
Doctor and Midwife	...	...	65	
Doctor and Queen's Nurse	...	...	23	
Midwife alone	...	...	11	
Outdoor Maternity staff	...	...	9	
			<hr/> 533 <hr/>	

Type of Confinement.

Normal	...	...	357
Abnormal	...	...	176
			<hr/> 533 <hr/>

The greatest number of stillbirths occurred in primigravida, viz., 164. There were 6,652 first babies born in the city during the year so that the percentage of stillbirths in this group was 2.46. For comparative purposes it was noted that in the group 2-4 parity there were in all 246 stillbirths with 4,569 births in all, giving a percentage of 2.2. In the group 5+ there were 123 stillbirths with 3,075 births in all, giving a percentage of 4.

Cause of death detailed according to place of confinement and to certification.

	Institution	Domiciliary
Abnormality in foetus	78	16
Conditions associated with cord ...	38	25
Haemorrhage in mother	50	3
Macerated foetus	45	11
Asphyxia	35	7
Toxaemia in mother	32	1
Prolonged or difficult labour	24	7
Conditions associated with placenta ...	21	10
Maternal disease	17	4
Cerebral Haemorrhage	18	3
Prematurity	11	10
Rh. factor	9	4
Atelectasis	8	2
Post Maturity	3	1
Malpresentation	2	0
Conjoined tissues	2	0
Congenital debility	1	3
Oligo hydramnios	0	1
Precipitate labour	0	1
Cause unknown	22	8
	<u>416</u>	<u>117</u>

Stillbirths, according to social class were as follows:—

1. High ranks of business or professional life ...	0.45 per cent.
2. Retail trades, clubs, teachers, etc., farmers ...	0.89 per cent.
3. Skilled labour	2.5 per cent.
4. Neither artisan nor wholly unskilled, farm labourer	2.5 per cent.
5. Unskilled labour	2.9 per cent.

MORTALITY AMONG TODDLERS.

During the last 25 years there has been not only a steady fall in the mortality of children at ages 1-5 years, but a changing pattern of mortality. No longer are the deaths from the infectious diseases of childhood the major cause of death. These now are responsible for only a few deaths. Their place has been taken by accidental and violent deaths. Of the total 118 deaths, 21 were due to accidents. A further point of importance is that of these 21 deaths, only 7 were due to road accidents, while 7 occurred in the home, and 7 were due to other types of accident—climbing, drowning, etc. The next largest cause of death was congenital malformations—15 deaths, 5 male and 10 female. Pneumonia accounted for 8 male and 2 female deaths. The third largest cause of death was tuberculosis; 2 males and 4 females from respiratory tuberculosis and 4 males and 2 females from tubercular meningitis.

There were no deaths from diphtheria. The following table compares the infant mortality rate with that of toddlers and shows the progressive reduction in both since 1900 :—

Year	Infant Mortality Rate per 1,000 Births	Deaths 1-5 Years : Actual Number	Rate per 1,000 Population at Ages 1-5 Years
1900	153	2,754	39.2
1911	139	1,862	26.7
1921	106	1,494	19.2
1931	105	1,341	17.2
1938	87	753	9.8
1943	82	394	5.3
1946	67	276	3.6
1947	77	296	3.7
1948	56	219	2.7
1949	49	203	2.4
1950	44	191	2.2
1951	46	171	2.1
1952	41	140	1.8
1953	36	118	1.5

CHILD WELFARE SCHEME.

The only addition to the clinics during 1953 has been the operation of the Mobile Unit on a Wednesday in Pollok and Househillwood housing scheme.

* The total number of weekly sessions has been further increased by the establishment of post-natal clinics and there are now 46 ante-natal 20 post-natal, 17 consultative, 75 child welfare, and 4 ultra-violet ray treatment sessions. In addition, three child welfare clinics still continue to be held at the Royal Maternity and Women's Hospital.

The time-table of the clinics as now organised is as follows :—

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS OF AGE.

Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
20 COCHRANE STREET— Thursday, 9 a.m.	—	—
33 RICHARD STREET— Monday, 1.30 p.m. Wednesday, 9 a.m. Thursday, 9 a.m. Friday, 9 a.m.	Monday, 9 a.m. Tuesday, 1.30 p.m. — —	Monday, 9 a.m. † Thursday, 1.30 p.m. — —
12 SANDY ROAD— Monday, 9 a.m. Wednesday, 1.30 p.m. Thursday, 1.30 p.m.	Monday, 1.30 p.m. Thursday, 9 a.m. —	Monday, 1.30 p.m. † Friday, 9 a.m. —
18 PLEAN STREET— Tuesday, 9 a.m. Wednesday, 9 a.m.	Wednesday, 1.30 p.m. —	Wednesday, 1.30 p.m. † Thursday, 1.30 p.m.
BLACKWOOD STREET— Tuesday, 1.30 p.m.	Wednesday, 9 a.m. —	Wednesday, 9 a.m. † Friday, 1.30 p.m.
ROYAL HOSPITAL FOR SICK CHILDREN— Tuesday, 9 a.m. Friday, 1.30 p.m.	— —	— —
15 GLENBARR STREET— Monday, 9 a.m. Tuesday, 1.30 p.m. Wednesday, 9 a.m. Friday, 9 a.m. Friday, 1.30 p.m.	Monday, 1.30 p.m. Thursday, 9 a.m. — — —	Thursday, 1.30 p.m. † Tuesday, 9 a.m. — — —

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND
CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
194 FERNBANK STREET—		
Monday, 1.30 p.m.	Monday, 9 a.m.	Monday, 9 a.m.
Tuesday, 9 a.m.	Thursday, 1.30 p.m.	†Tuesday, 1.30 p.m.
Thursday, 9 a.m.	—	—
101 DENMARK STREET—		
Monday, 1.30 p.m.	Thursday, 1.30 p.m.	Friday, 9 a.m.
Friday, 9 a.m.	Friday, 9 a.m.	†Wednesday, 9 a.m.
Friday, 1.30 p.m.	—	—
614 DOBBIES LOAN—		
Monday, 9 a.m.	Monday, 1.30 p.m.	Friday, 9 a.m.
Tuesday, 9 a.m.	Tuesday, 1.30 p.m.	†Wednesday, 9 a.m.
Wednesday, 1.30 p.m.	Friday, 9 a.m.	—
Thursday, 9 a.m.	—	—
Thursday, 1.30 p.m.	—	—
Friday, 1.30 p.m.	—	—
60 AVENUEPARK STREET—		
Monday, 1.30 p.m.	Tuesday, 9 a.m.	Friday, 1.30 p.m.
Wednesday, 9 a.m.	Thursday, 1.30 p.m.	†Tuesday, 1.30 p.m.
Friday, 9 a.m.	—	—
106 ORR STREET—		
—	Monday, 9 a.m.	Monday, 9 a.m.
—	Tuesday, 9 a.m.	†Tuesday, 1.30 p.m.
—	Wednesday, 9 a.m.	—
—	Thursday, 1.30 p.m.	—
—	Friday, 9 a.m.	—
10 REDAN STREET—		
Monday, 1.30 p.m.	—	—
Tuesday, 1.30 p.m.	—	—
Wednesday, 9 a.m.	—	—
Wednesday, 1.30 p.m.	—	—
Thursday, 9 a.m.	—	—
Friday, 1.30 p.m.	—	—
150 WELLSHOT ROAD—		
Monday, 1.30 p.m.	Monday, 9 a.m.	Friday, 9 a.m.
Tuesday, 9 a.m.	Tuesday, 1.30 p.m.	†Wednesday, 1.30 p.m.
Tuesday, 1.30 p.m.	Thursday, 1.30 p.m.	—
Wednesday, 9 a.m.	Friday, 9 a.m.	—
Wednesday, 1.30 p.m.	—	—
Friday, 1.30 p.m.	—	—
26 FLORENCE STREET—		
Monday, 9 a.m.	Monday, 9 a.m.	Tuesday, 9 a.m.
Monday, 1.30 p.m.	Monday, 1.30 p.m.	†Friday, 1.30 p.m.
Tuesday, 1.30 p.m.	Tuesday, 1.30 p.m.	—
Thursday, 1.30 p.m.	Wednesday, 1.30 p.m.	—
Friday, 9 a.m.	—	—
FAULDHUSE STREET—		
Thursday, 9 a.m.	Wednesday, 9 a.m.	Wednesday, 9 a.m.

WELFARE CENTRES FOR EXPECTANT AND NURSING MOTHERS AND
CHILDREN UNDER FIVE YEARS OF AGE—*Continued.*

Clinics for Children and Nursing Mothers	Clinics for Expectant Mothers	Consultative Clinics and Clinics for Post-natal Mothers
39 BENGAL STREET—		
Tuesday, 1.30 p.m.	Friday, 1.30 p.m.	Tuesday, 9 a.m.
Wednesday, 1.30 p.m.	—	†Friday, 9 a.m.
46 BALVICAR STREET—		
Monday, 9 a.m.	Friday, 1.30 p.m.	Friday, 1.30 p.m.
Monday, 1.30 p.m.	—	†Friday, 9 a.m.
Thursday, 9 a.m.	—	—
MOBILE UNIT, HOUSEHILLWOOD—		
Monday, 1.30 p.m.	Monday, 9 a.m.	—
Thursday, 1.30 p.m.	Thursday, 9 a.m.	—
MOBILE UNIT, POLLOK—		
Wednesday, 1.30 p.m.	Wednesday, 9 a.m.	—
PROSPECTHILL ROAD, MOUNT FLORIDA—		
Monday, 1.30 p.m.	Friday, 9 a.m.	Friday, 9 a.m.
Tuesday, 9 a.m.	—	—
Thursday, 1.30 p.m.	—	—
132 WEIR STREET—		
Tuesday, 9 a.m.	—	—
Thursday, 9 a.m.	—	—
2 SUMMERTOWN ROAD—		
Tuesday, 9 a.m.	Monday, 9 a.m.	Thursday, 1.30 p.m.
Wednesday, 1.30 p.m.	Thursday, 9 a.m.	†Monday, 1.30 p.m.
Friday, 9 a.m.	Thursday, 1.30 p.m.	—
20 ARKLET ROAD—		
Monday, 1.30 p.m.	Monday, 9 a.m.	Friday, 9 a.m.
Wednesday, 1.30 p.m.	Tuesday, 9 a.m.	†Thursday, 9 a.m.
Thursday, 1.30 p.m.	Tuesday, 1.30 p.m.	—
Friday, 1.30 p.m.	—	—
74 BERRYKNOWES ROAD—		
Monday, 9 a.m.	Friday, 1.30 p.m.	Friday, 1.30 p.m.
—	—	†Friday, 1.30 p.m.
CRAIGMUIR ROAD—		
Wednesday, 1.30 p.m.	Monday, 1.30 p.m.	Monday, 1.30 p.m.
Thursday, 9 a.m.	Wednesday, 9 a.m.	—
Friday, 1.30 p.m.	—	—
MATERNITY HOSPITAL—		
*Monday, 9 a.m.	Monday, 1.30 p.m.	—
*Wednesday, 9 a.m.	Tuesday, 1.30 p.m.	—
*Friday, 9 a.m.	Wednesday, 1.30 p.m.	—
—	Thursday, 1.30 p.m.	—
—	Friday, 1.30 p.m.	—
—	Saturday, 9.30 a.m.	—

* Clinics for infants under One Year of Age.

† Consultative Clinics.

INFANT CONSULTATIONS.

There was an increase of 165 in the number of sessions, 3,661 in 1953 compared with 3,496 in 1952.

The total number of primary attendances of all children was 12,953 and subsequent attendances 106,787 compared with the corresponding figures of 12,175 and 108,738 in 1952. Despite the decreased numbers recorded at some of the clinics primary attendances of children under one year of age were on the whole higher, 9,678 against 9,223 in 1952, while subsequent attendances, 86,958 were more by 3,844, an increase of 4.7 and 4.4 per cent. respectively.

The following table gives the attendances at each consultation centre during 1953, with the corresponding total figures for the previous year :—

ATTENDANCES AT INFANT CONSULTATIONS, 1953.

	No. of Con- sulta- tions held	Children —1 year No. of Attendances		Children +1 year No. of Attendances		Total No. of Attendances		1952—Total No. of Attendances	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
<i>Central—</i>									
Cochrane Street ...	52	82	721	39	300	121	1,021	149	898
Richard Street ...	202	394	3,395	321	899	715	4,294	639	4,480
Partick ...	152	395	3,506	96	538	491	4,044	539	4,084
Blawarthill ...	103	300	3,096	106	529	406	3,625	380	2,512
Royal Hospital for Sick Children ...	99	137	1,726	67	348	204	2,074	171	1,655
Netherton ...	51	184	1,540	98	221	282	1,761	268	2,184
<i>North—</i>									
Provan ...	249	648	4,654	208	584	856	5,238	872	5,292
Springburn ...	151	429	4,242	63	546	492	4,788	559	4,500
Denmark Street ...	146	433	3,702	77	252	510	3,954	545	4,262
Cowcaddens ...	303	548	5,310	356	2,068	904	7,378	804	7,977
Maryhill ...	150	516	4,348	242	1,376	758	5,724	700	5,926
<i>East—</i>									
Redan Street ...	258	1,124	8,371	248	2,261	1,372	10,632	1,343	11,011
Shettleston ...	302	790	7,445	145	1,986	935	9,431	944	9,583
<i>South-East—</i>									
Gorbals ...	249	723	5,962	166	1,267	889	7,229	1,123	8,497
Pollokshaws ...	103	216	2,057	60	429	276	2,486	535	3,374
Balvicar Street ...	148	258	3,765	163	764	421	4,529	457	4,833
Oatlands ...	52	225	1,867	27	262	252	2,129	242	1,980
Mount Florida ...	132	454	4,307	189	870	643	5,177	—	—
Mobile Unit— Househillwood ...	100	425	2,580	53	606	478	3,186	92	458
Mobile Unit— Pollok ...	3	1	8	—	5	1	13	—	—
<i>South-West—</i>									
Weir Street ...	103	191	1,695	66	383	257	2,078	277	2,638
Govan ...	153	382	3,409	159	961	541	4,370	494	4,046
Elderpark ...	200	467	5,300	183	1,333	650	6,633	686	7,491
Penilee ...	152	224	2,695	75	734	299	3,429	317	3,864
Berryknowes ...	48	132	1,257	68	307	200	1,564	39	193
<hr/>									
	3,661	9,678	86,958	3,275	19,829	12,953	106,787	12,175	101,738

Infant consultations are also held in the Maternity Hospital and in 1953 there were 2,140 attendances compared with 2,310 in 1952.

"Health of Mother and Child."—This booklet continued in demand at the centres and 3,466 copies were sold during the year. Large numbers continued to be supplied to other Local Authorities in Scotland and in England. Requests for copies continued to be received from all parts of the world.

Ante-Natal Consultations.—Sessions at ante-natal clinics numbered 2,269 compared with 2,206 for the preceding year. The total attendances were 48,718 compared with 51,637 in 1952 ; primary attendances were 6,292, or 503 less than the previous year (1952) ; subsequent attendances numbered 42,426, a decrease of 2,416. Consultations and attendances at each of the Centres are shown in the following table :—

ATTENDANCES AT ANTE-NATAL CLINICS, 1953.

				Number of Attendances		
				Primary	Subsequent	Total
		No. of Clinic Sessions				
Richard Street	...	99		286	1,748	2,034
Partick	...	100		276	1,922	2,198
Blawarthill	...	22		196	1,339	1,535
Netherton	...	52		96	663	759
Provan	...	100		262	1,493	1,755
Springburn	...	100		161	1,092	1,253
Denmark Street	...	102		247	1,631	1,878
Cowcaddens	...	149		218	1,436	1,654
Maryhill	...	103		297	2,188	2,485
Orr Street	...	253		739	6,006	6,745
Shettleston	...	201		520	3,351	3,871
Gorbals	...	199		602	3,774	4,376
Pollokshaws	...	53		140	866	1,006
Balvicar Street	...	50		96	739	835
Oatlands	...	52		139	915	1,054
Mount Florida	...	50		102	684	786
Mobile—Houshillwood		100		290	1,786	2,076
Mobile—Pollok	...	3		1	15	16
Govan	...	152		800	4,597	5,397
Elderpark	...	150		586	4,282	4,868
Penilee	...	100		160	1,355	1,515
Berryknowes	...	49		78	544	622
				<u>2,269</u>	<u>42,426</u>	<u>48,718</u>

ATTENDANCES AT POST-NATAL AND CONSULTATIVE CLINICS, 1953.

	No. of Consultations		Primary		Subsequent		Total	
	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative	Post-natal	Consultative
Richard Street ...	48	44	109	132	47	52	156	184
Partick ...	53	45	102	137	42	37	144	174
Blawarthill ...	52	47	45	106	33	117	78	223
Netherton ...	52	25	31	41	15	14	46	55
Provan ...	52	44	99	80	78	26	177	106
Springburn ...	48	48	23	76	9	93	32	169
Denmark Street ...	50	47	32	64	12	67	44	131
Cowcaddens ...	50	47	47	160	6	97	53	257
Avenuepark Street	48	45	59	96	142	46	201	142
Orr Street ...	49	44	156	210	159	126	315	336
Shettleston ...	50	46	145	138	66	153	211	291
Gorbals ...	50	48	137	171	84	110	221	281
Pollokshaws ...	52	41	72	132	241	144	313	276
Balvicar Street ...	50	47	50	76	19	70	69	146
Oatlands ...	52	—	45	—	40	—	85	—
Mount Florida ...	50	—	70	—	51	—	121	—
Govan ...	51	48	43	458	16	166	59	624
Elderpark ...	49	51	49	392	99	46	148	438
Penilee ...	48	—	49	—	49	—	98	—
Berryknowes ...	46	3	9	10	14	—	23	10
	1,000	720	1,372	2,479	1,222	1,364	2,594	3,843

MATERNAL DEATHS.

In attendance at the ante-natal clinics were 6,361 patients whose pregnancy (excluding abortions) terminated in 1953. Among these, 4 deaths occurred, giving a death rate of 0·63 per thousand births compared with 0·58 in 1952. Causes of death among these 4 women were as follows :—

Toxaemia of pregnancy ...	...	...	...	...	1
Puerperal Eclampsia ...	...	...	...	...	1
Acute Leukaemia ...	...	...	...	...	1
Pneumonia ...	...	...	...	...	1

Excluding the two deaths which had little association with the puerperal state, the maternal death rate of mothers attending the clinics was 0·31 compared with 1·06 for the *city* as a whole.

The following table, based on figures supplied by the Registrar General, compares the rates from each cause for the *whole city* with those of previous years.

STATEMENT SHOWING MATERNAL DEATHS AND RATES PER 1,000 BIRTHS
IN GLASGOW AND SCOTLAND IN THE YEARS 1949-1953.

	Deaths					Rate per 1,000 (live and still) Births				
	1949	1950	1951	1952	1953	1949	1950	1951	1952	1953
Accidents of Pregnancy ...	11	5	3	4	6	0.51	0.24	0.15	0.19	0.29
Puerperal Haemorrhage ...	6	1	7	10	4	0.28	0.05	0.34	0.48	0.19
Puerperal Septicaemia, in- cluding Post-abortive Sepsis	6	4	5	5	5	0.28	0.19	0.24	0.24	0.24
Toxaemia of Pregnancy, Albuminuria Convulsions	7	5	1	6	5	0.32	0.24	0.05	0.29	0.24
Other Puerperal Diseases	4	6	4	2	2	0.19	0.29	0.19	0.09	0.10
Totals— Glasgow ...	34	21	20	27	22	1.58	1.02	0.97	1.29	1.06
Scotland ...	124	106	99	92	85	1.3	1.1	1.1	1.0	0.9

CHILD PSYCHIATRY.

When this clinic was first established in October, 1952, it was intended that it should eventually take the form of an orthodox child guidance clinic with a fully-trained psychiatric social worker as a member of the staff ; in other words, that a child guidance clinic should exist within the Maternity and Child Welfare Service. During the past year, however, it became evident that a large part of the value of the clinic lay in its ready acceptance by the mothers and that for this reason it is important that the clinic should retain as nearly as possible the characteristics of an ordinary child welfare clinic. An anxious mother who is referred by her doctor to a "child guidance" clinic is often upset by the supposed suggestion that her child is "mental" or "defective." It is better to refer to the clinic by some such non-committal term as the "problems clinic" and to consider its main function as preventive and advisory in the field of mental health. The "true" child guidance clinic lies on the curative side of the boundary between normality and mental abnormality.

The cases treated at the "problems clinic" are those in which the problem is still fluid and neither mother nor child is mentally ill. On the other hand, where the problem has become fixed and matters have reached an impasse, it is considered advisable to refer the case to a child guidance clinic, the mother and or child now being mentally sick. In the first instance, the child is vulnerable and showing signs of stress and strain to some tension ; in the second, the child has broken down and is ill. The medical officer at the clinic, therefore, can deal single-handed with all cases referred. Separate treatment of mother and child is not required.

Many of the cases are referred by health visitors and it is gratifying to note the increasing part the health visitors are playing in the work of the prevention of mental breakdown in members of families. They are able to supply the medical officer with the necessary data about the home environment and personal relations within the family.

It will be seen, therefore, that the first purpose of this clinic is to help parents to resolve where possible tensions in the child's environment and to strengthen the child to deal with those tensions which cannot be removed. The second purpose is to recognise cases where breakdown has occurred and to refer such patients to a fully staffed child guidance clinic.

The clinic affords opportunities to diagnose mental maladjustments in other members of the family.

During the first two months, i.e., November and December, 1952, the clinic was just getting under way and methods of dealing with the cases were being considered. From 1st January to 31st December, 1953, 110 cases were dealt with. The numbers, of course, cannot be very great as it takes some time to deal with each individual case if the best results are to be obtained.

Defaulters are sent one letter with a new appointment ; if there is no response, the case is closed. It has been found that in cases of recurrent defaulting the prognosis is poor.

During the year, in 32 cases a satisfactory adaptation has been made and all symptoms have disappeared. Eight cases were referred elsewhere on account of severe emotional disturbance.

The following table indicates the types and numbers of cases referred in the past year :—

Enuretics	43
Tantrums	19
Irrational Fears	7
Soiling	5
Feeding Difficulties	4
Morbid Shyness	4
Night Terrors	3
Disturbances of Sleep	3
Stammering	3
Following Hospitalisation	3
Tics	3
Spastic	1
<i>Adults—</i>	
Depression	7
Anxiety States	3
Dyspareunia	2

DENTAL TREATMENT OF EXPECTANT AND NURSING MOTHERS.

Under the provisions of the National Health Service (Scotland) Act, 1947, dental treatment was again made available to expectant and nursing mothers on application and free of cost to the patient.

During 1953, more new cases were seen than in the previous year and the total attendances at clinics were the highest since 1949. Below is a summary of the work performed during 1953 and some comparative statistics for each of the previous years to 1948, in which year the Act was introduced.

	1953	1952	1951	1950	1949	1948
Total Attendances	3,352	3,158	3,062	2,988	4,706	4,899
First Attendances	668	618	673	645	871	915
Extractions ...	3,316	3,305	3,722	3,321	5,276	7,045
Dentures Completed	513	515	490	487	920	1,109

Fillings to the number of 414 were inserted, scalings totalled 94 and other operations amounted to 830.

ULTRA-VIOLET RAY CLINICS.

It is still necessary and desirable to continue the arrangements for light treatment of certain children. The housing of the city is such that large numbers of families are living in a bad environment, and ultra-violet light treatment is most beneficial in the prevention or early treatment of rickets and malnutrition.

The installation and the results of treatment have been fully dealt with in previous reports, so that only the records of numbers treated are here given in respect of 1953 :—

RECORD OF ATTENDANCES AND CONSULTATIONS DURING 1953.

			Children —1 year Number of Attendances		Children +1 year Number of Attendances		Mothers Number of Attendances		Total Number of Attendances	
			Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Provan	...	100	11	98	188	4,635	2	2	201	4,735
Govan	...	101	20	164	145	2,917	—	—	165	3,081
			201	262	333	7,552	2	2	366	7,816

HEALTH VISITORS' TRAINING COURSE, 1952-53.

The number of students trained during the session was 39 compared with 27 in 1952-53, and of that number 19 were "assisted" students. There is a general shortage of trainees all over the country, a reflection in part of the shortage of trained nurses in general and in part of the salary and conditions of service of a health visitor compared to those of a ward sister in hospital. This general decrease is one that is affecting all areas, and there are many vacancies for student health visitors in the various training courses.

HEALTH VISITING SERVICE.

The number of health visitors, including the administrative staff and two sister tutors, was increased to 96 during 1953. This is three more than in 1952. This number is insufficient to carry out adequately the responsible duties of health visitors in the Maternity and Child Welfare Service. In present circumstances, with the general shortages of nurses, it is difficult to recruit additional staff.

INFANT VISITATION.

Under the scheme of infant visitation every birth is visited and the following table shows the record of those visited, together with certain information obtained :—

	1953	1952	1951	1950
Inquiry cards returned ...	20,982	21,049	20,830	20,860
Full information obtained	20,672	20,713	20,449	20,435
Others	310	336	381	425

Of those for whom full information was obtained :—

Legitimate	19,886	20,122	19,668	19,720
Illegitimate	792	619	669	706
Born at full term ...	19,230	19,138	18,795	18,892
Premature births ...	1,448	1,603	1,542	1,534

Nature of Feeding at First Visit :—

Breast	9,157	9,495	9,391	10,048
Artificial	9,484	9,282	9,068	8,419
Breast and Artificial ...	1,085	954	828	910
Still-born	556	582	568	586
Dead at First Visit ...	406	436	482	463

VISITATION BY NURSES.

Altogether the health visitors made 261,280 home visits during the year, compared with 262,721 during the preceding year. Of these totals the respective numbers for infants under one year of age were 111,034 and 110,357. First visits numbered 20,770. In addition 72,803 visits were made to houses in respect of toddlers, while 17,808 other toddlers were seen during the course of routine visitation of infants. Other visits were made for special enquiries, etc., as shown in the following table :—

VISITS MADE BY NURSES.

	1953	1952
Infants under one year—Primary visits ...	20,770	20,759
Infants under one year—Subsequent visits ...	90,264	89,598
	<hr/> 111,034	<hr/> 110,357
Children one to five years ...	72,803	74,403
Children seen while visiting infants ...	17,808	17,434
Ophthalmia Neonatorum ...	529	852
Puerperal Fever ...	472	390
Maternal Deaths Enquiries ...	44	56
Infants Death ...	331	377
Ante-natal Visits ...	2,358	2,864
Venereal Diseases ...	33	38
Light Treatment ...	241	283
Pneumonia ...	—	—
Other Visits ...	4,420	3,812
Houses Shut ...	37,047	35,882
Final Visits ...	14,160	15,973
	<hr/> 261,280	<hr/> 262,721

HOME NURSING SERVICE.

On 31st December, 1953, the nursing staff numbered 126. In this figure are included the Senior Superintendent of the Home Nursing Service, 5 Superintendents of District Homes, 4 Assistant Superintendents, 54 Queen's Nursing Sisters on general nursing duties, 21 on maternity work, 20 Student District Nurses training for the Queen's Roll Examination, 1 Pupil Midwife undertaking Part II Midwifery Training, 6 Registered General Nurses employed full-time on a temporary basis, and 14 Registered General Nurses on part-time relief duties. In addition, 1 Pupil Midwife was undertaking Part I Midwifery Training in hospital.

The majority of the staff are housed in District Nurses' Homes throughout the city. Approximately 30 live in their own homes.

There has been a slight decrease in the number of maternity cases attended during the year and there has been a slight increase in the number of surgical patients, and also in the number of operations attended on the district.

The number of new medical cases shows a slight increase of 200, but a striking feature of the year's work is the very large increase in the number of new cases of tuberculosis. This increase is due to two main reasons—the modern treatment by streptomycin, etc., which can be carried out in the patient's own home, and the number of patients who can now be so dealt with at home because of the policy of granting now houses to cases of tuberculosis. The number treated by the Home Nursing Service rose from 315 in 1952 to 810 in 1953, and the visits from 10,138 to 23,219. The place of the Home Nursing Service in the care of the tuberculous patient is obviously becoming increasingly important.

Approximately 62 per cent. of the total general nursing visits paid during the year were to patients aged 65 years and over.

The number of nursing appliances issued on loan during the year was 2,932, a small fee being charged for their use. These were on loan for both long and short periods. There were 98 wheel chairs on loan to patients during the year, some on a temporary basis until a permanent chair could be provided, and a large number were issued for the summer months only, and these were of great benefit to patients who otherwise would not have been able to get out or go on holiday. At times the demand almost exceeded the supply.

During the year 36 students completed district training and were successful in the Queen's Roll Examination. Thirty-two are employed on the staff of this Association and four on districts outwith Glasgow. All nurses must be State-Registered General Nurses to be accepted for training. These nurses take district training in six months and those holding in addition the Certificate of the Central Midwives Board may take training in four months.

The Glasgow District Nursing Association is recognised by the Central Midwives Board for Scotland as a Training Centre for the Part II Midwifery Examination, and training is given to those students who do not possess the Certificate and are desirous of taking it. Two pupils on our own staff completed the six months' training and were successful in the examination.

Under the scheme of co-operation with the Western Regional Hospital Board, 21 pupil midwives from Cresswell Maternity Hospital, Dumfries, 25 from the County Maternity Hospital, Bellshill, and one from Falkirk and District Royal Infirmary, were seconded to take their district cases with the staff of the Association, and a number of pupil midwives from the Glasgow Royal Maternity Hospital have also taken 178 district cases with the staff.

The Senior Superintendent attended a Conference for Superintendents of key Training Homes, and two of the Assistants attended courses for junior administrators at Roffey Park. A number of the nurses attended the refresher course organised jointly by the Royal College of Midwives and the Queen's Institute of District Nursing which was held in Glasgow in 1953.

Motor transport for gas and air appliances and for nurses at night on maternity duties is supplied by the Corporation.

The Glasgow District Nursing Association have provided 15 bicycles and two cyclemasters for nurses whose districts cover a large area.

Cases on books at 1st January, 1953	...	...	...	...	1,936
Number of new cases added	...	...	...	...	12,230
Number of cases dismissed	...	...	...	...	12,130
Number of cases remaining at 31.12.53	...	...	...	...	2,036
<i>Analysis of—</i>					<i>Cases</i>
General Nursing	...	...	9,602	...	...
Tuberculosis	...	...	810	...	...
Gynaecological	...	...	104	...	...
Maternity	...	...	1,714	Puerperia	...
				Ante-Natal	...
<i>Dismissed—</i>					<i>Visits</i>
Convalescent	...	...	...	...	...
Hospital	...	...	...	...	...
Died	...	...	...	...	...
Removed	...	...	...	...	...
Number of Operations attended	...	...	...	...	214
Total Number of Hours on Duty	...	...	...	...	234,372
Total Number of Visits paid	...	...	...	...	327,826
Number of Inspections of Nurses	...	...	...	...	162

NURSING HOMES REGISTRATION (SCOTLAND) ACT, 1938.

One new certificate of registration was issued during the year. This was in respect of a Home which for many years had been registered as a Maternity Nursing Home. After alterations, including the provision of additional beds, application was made for registration of the premises for medical as well as maternity cases.

One registration was cancelled owing to the retiral of the owner and the sale of the property.

Three Homes were granted exemption under the Act.

The position of the Nursing Homes at 31st December, 1953, was as follows :—

Registered	...	...	...	...	29
Exempted	...	...	...	...	3
					<u>32</u>

NURSES' AGENCIES (SCOTLAND) REGULATIONS, 1945.

Seven applications for renewal of licences under the above Act were made during the year. The premises were visited, found to be suitable for their purpose and the licences granted.

Towards the end of the year one Agency cancelled its registration, leaving a total of 6 agencies on the roll at 31st December, 1953, one fewer than in the previous year.

DAY NURSERIES (INCLUDING 24-HOUR NURSERIES) AS AT END OF YEAR.

(1)	(2) State whether approved for training	No. of Approved Places		No. of Children on register at end of year		Average daily attendances during year		Waiting lists at end of year	
		Under		Under		Under		Under	
		2 yrs.	5 yrs.	2 yrs.	5 yrs.	2 yrs.	5 yrs.	2 yrs.	5 yrs.
(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
<i>Nurseries Provided by the Authority—</i>									
Cowcaddens, 91 Dunblane St., C.4. ...	Yes	15	30	12	29	11	26	68	30
Bridgeton, 106 Orr St., S.E.	Yes	20	30	20	32	16	27	71	129
Kingston, 132 Weir St., C.5	No	8	32	2	38	4	31	22	18
42 Bedford Street, C.5 ...	No	10	30	10	27	6	20	12	19
7 Broompark Circus, Dennistoun, E.1 ...	Yes	25	35	25	35	18	27	32	33
3 Clutha Street, Ibrox, S.W.1	Yes	20	30	20	30	14	23	30	5
60 Craik Street, Parkhead, E.1	Yes	15	35	15	35	14	23	45	27
Elderpark, Arklet Rd., S.W.1	No	10	30	10	33	6	23	16	7
1107 Gt. Western Road, W.2	Yes	15	25	15	26	11	18	33	57
69 Ellesmere Street, Hamilton-hill, N. ...	Yes	10	30	13	32	12	24	44	43
77 Holmlea Road, Langside ...	Yes	20	30	20	29	17	24	58	56
7 Onslow Dr., Dennistoun, E.1	Yes	20	40	22	38	16	29	33	28
11 Greenbank St., Pollokshaws	No	10	30	3	37	2	27	7	24
Quarrybrae, Pharonhill Street, Parkhead, E.1 ...	Yes	21	—	21	—	13	—	35	—
1 Sandyford Pl., Sauchiehall Street, C.3 ...	Yes	22	28	26	28	18	28	80	44
6 Westereraigs, Dennistoun, E.1 ...	No	15	25	16	27	9	20	20	23
Total ...	...	256	460	250	476	187	370	606	543

Total attendances numbered 132,602 compared with 133,731 attendances in 1952.

RESIDENTIAL HOMES.

SCOTSTOUN HOUSE.

During 1953, Scotstoun House has again been fully utilised as a convalescent home for pre-school children recommended from child welfare clinics. The waiting list was closed from March until September as it had become much too long, and the waiting period for admission is now only a few weeks.

Further improvements were carried out in the bathroom unit of the hutted part of the home.

The home accommodates 4 infants, 4 tweenies, and 24 toddlers. During 1953, the number of admissions was 152.

9 WINTON DRIVE AND GLENROSA, 47 MAXWELL DRIVE.

These two homes are residential nurseries for the temporary care of pre-school children whose mothers are in hospital, for a period not exceeding one month.

The demand for admission continues to be heavy, and both homes are usually filled.

The number of children admitted in 1953 to 9 Winton Drive was 373 and to Glenrosa was 423.

MILLBRAE HOME.

During 1953 this home has again been fully occupied with children under one year requiring B.C.G. vaccination. Of the total accommodation for 35 children, 16 cots are reserved for neo-natal cases coming directly from maternity hospital units. Recently there has been an increasing demand for the admission of very young infants born at home.

The number of admissions during 1953 was 204. Of these, 104 neo-natal cases were vaccinated before admission, and 90 were vaccinated in Millbrae. One child was found unsuitable for vaccination after admission and two were taken home against advice.

CARNBOOTH HOME.

During 1953 this home has again been used for the accommodation of children aged 1-5 years, requiring B.C.G. vaccination. The number admitted was 81, and the number vaccinated during 1953 was 71. Two children were found to be unsuitable for vaccination after admission. The waiting list is now very short for this age-group.

CHILDREN'S DEPARTMENT HOMES.

The medical care and supervision of children in four of the homes in Glasgow maintained by the Children's Department continues to be carried out by members of the Child Welfare staff. These homes are Eglinton (entirely for young children up to three years), Lochgarry, Eversley and Castlemilk, all of which have accommodation for children under 5 years of age. Routine measures for prevention of infection in the homes include vaccination, immunisation against diphtheria and whooping-cough and investigation of possible tubercular infections. Increasing numbers of children are being admitted to these homes owing to prolonged illness of the mother, in many cases due to tuberculosis. Where found suitable, B.C.G. vaccination is carried out.

The medical officer in charge is responsible for maintaining a rota of doctors from the Child Welfare staff for emergency visits to homes at nights and week-ends, and for medical examination of children requiring admission outwith office hours.

TRAINING OF NURSERY STUDENTS.

The scheme of training was continued during 1953 and approximately 98 students were in the various stages of the four years' course of training for the Nursery Nurses' Certificate. During the year 41 students sat their examination.

NURSERIES AND CHILD MINDERS.

The Nurseries and Child Minders Regulation Act which came into operation in August, 1948, provides for the regulation of certain nurseries and of persons who for reward receive children into their homes to look after them.

During 1953 applications were granted in respect of the following premises :—

3 Doune Gardens	Nursery Class.
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The following were registered prior to 1953 and were still in operation at the end of the year :—

29 Oakfield Avenue, W.2	...	...	Nursery Class.
68 Overnewton Street, C.3	...	...	Toddlers' Playcentre.
3 Belgrave Terrace, W.2	...	...	Nursery Class
30 Burnbank Gardens, N.W.	...	...	Nursery School
40 Clouston Street, N.W.	...	...	Nursery.
12 Bruce Road, S.1	...	...	Nursery School.
24 Regent Park Square, S.1	...	...	Nursery School.
Black Institute, Black Street, C.4	...	...	Toddlers' Playground.
St. Mark's, Lancefield Street, C.3	...	...	Toddlers' Playcentre
Jewish Nursery School, 15 Queen Mary Avenue	...	...	Nursery School.

DOMESTIC HELPS.

There are now 1,004 women enrolled in this service, all too few in comparison with the ever increasing number of applications received for this assistance. To cope with this demand the time given to individual cases has had to be considerably curtailed. The maximum period has been cut from ten weeks to eight ; ninety per cent. of the full-time helps attend two cases, several three, and in some instances only two hours daily help can be provided.

Applications for help in maternity cases were more numerous in 1953, 2,813 compared with 2,667 in 1952 and 2,761 in 1951. Of these 2,264 were completed, 347 cancelled and 202 continued into 1954. Of the 1952 cases still outstanding 206 were completed in 1953 and 83 were cancelled.

There was some decrease in the General scheme applications, 3,073 compared with 3,384 in 1952. Of these 430 were cancelled leaving 2,643 cases to be dealt with compared with 2,853 in 1952. Almost seventy-two per cent. of the cases were over 60 years of age.

In a large number of instances there is no family or near relative to care for the applicant who is so incapacitated by illness or infirmity as to require assistance for a more prolonged period than that permitted by the general scheme (eight weeks). A special " E " scheme was devised to provide assistance for the duration of such person's incapacity. The number registered under this scheme in 1953 was 579 of which nine were cancelled. The total cases dealt with during the year totalled 1,204 as there was in addition one case continued from 1947, five from 1948, 23 from 1949, 86 from 1950, 127 from 1951 and 212 from 1952. Nine hundred and forty-one or 91·8 per cent. of these cases were over 60 years of age compared with 92·5 per cent. in 1952 and 877 of them were unable to pay more than the minimum charge of 1s. a half-day.

It should be noted that as the number on the " E " scheme rises, as it inevitably does, more helps are permanently employed on these long-term cases which means that fewer are available for the general cases. This position leads to difficulties at certain periods of the year when intercurrent illness occurs in the population, particularly respiratory infections.

Owing to the peculiarly crippling nature of their disability a similar long-term scheme of assistance had to be arranged for cases of disseminated sclerosis. At the end of 1953 there were 41 cases in this group. 14 under 40, 21 of them between 40 and 60 and 6 over 60. Twenty-six were unable to pay more than the lowest charge of 1s. per half-day.

A tuberculosis scheme of domestic helps came into operation in 1949 and 45 helps were specially enrolled to provide domiciliary care for tuberculous patients who are being nursed in their own home while awaiting admission to hospital, or after dismissal. There are now 50 home helps giving this specialised assistance. They must be over the age of 40 and no children under 15 years must be resident in their home. Each recruit undergoes a complete medical examination, including X-ray examination, and has a routine medical check-up every six months. One hundred and nineteen cases of tuberculosis applied for help. Sixty-eight were assisted and 51 applications were cancelled. Of the 101 cases attended during the year, 62 cases were under 40 years, 29 were 40-60 years, and 10 were over 60.

The following table shows the illnesses or other conditions in respect of which applications for Home Helps under the general scheme were made.

Diseases					General and "E" Schemes			Total
					—40 yrs.	40-60 yrs.	+60 yrs.	
Influenza	...	...	...	...	13	42	57	112
Cancer	...	...	...	...	3	26	77	106
Diabetes	...	...	...	...	—	2	54	56
Intracranial Vascular Lesion	...	...	...	...	1	27	310	338
Valvular Disease of the Heart	...	...	...	...	13	105	510	628
Circulatory	...	...	...	...	16	95	340	451
Respiratory	...	...	...	...	32	73	299	404
Digestive	...	...	...	...	8	26	77	111
Kidney Disease	...	...	...	...	2	14	36	52
Accident	...	...	...	...	11	38	167	216
Post Operative	...	...	...	...	24	95	161	280
Debility Post Illness	...	...	...	...	6	17	249	272
Nervous Diseases	...	...	...	...	11	32	57	100
Hemiplegia	...	...	...	...	1	3	54	58
Paraplegia	...	...	...	...	—	2	6	8
Paralysis Agitans	...	...	...	...	—	3	19	22
General Paralysis	...	...	...	...	2	6	23	31
Rheumatism	...	...	...	...	4	49	236	289
Senility	...	...	...	...	—	—	92	92
Disseminated Sclerosis	...	...	...	...	6	13	3	22
All Other Causes	...	...	...	...	2	9	8	19
					155	677	2,835	3,667

MIDWIVES (SCOTLAND) ACTS.

During 1953 there was a decrease of 4 in the number of midwives who notified their intention to practise, so that there are now 130 on the register. The number of those entitled to registration by examination is 127, while the number of those registered as having been in practice in 1914 is now 1. There are also 2 with other recognised qualifications. The number who notified their intention to practise for the first time was 7.

On 31st December, 1953, there were 89 domiciliary midwives in full-time employment of the Corporation and approximately 21 Queen's nurses engaged full-time in midwifery. The Corporation midwives paid 30,373 ante-natal visits to their patients; 80,161 visits were also carried out during the puerperium. The Queen's nurses paid 43,532 visits. In addition the domiciliary midwives are responsible for the domiciliary training of the pupil midwives from the various ex-Corporation Hospital Maternity Units and a certain number of pupil midwives from the Glasgow Royal Maternity and Women's Hospital. During the year 174 pupil midwives were so trained. The scheme provides that there is always a domiciliary midwife and/or one of the non-medical supervisors with the pupil midwife at each confinement. For this training 47 of the midwives are approved by the Central Midwives Board.

The following table shows the record of work :—

- (i) Total number of births occurring in the area during year—that is before correction for mothers' residence :—

Live Births 20,430. Still Births 556. Total 20,986.

- (ii) Total number of births in (i) occurring in institutions (including private maternity homes) 13,309.

- (iii) Total number of births in (i) occurring at home 7,677.

- (iv) Number of births in (iii) classified to show nature of attendance at birth :—

(1)	Cases dealt with under Section 23 (2) of the National Health Service (Scotland) Act, 1947.				Other domiciliary cases.			
	Doctor present at actual confinement (2)	Doctor present at any time during Labour (3)	Doctor not present at any time (4)	Midwife alone (no doctor engaged) (4)	Doctor and midwife engaged (5)	Midwife alone (no doctor engaged) (6)	Without doctor or midwife (7)	
(a) Midwives employed by the Authority (including those engaged on a fee-per-case basis)	2,119	635	1,211	1,042	—	—	—	5.0
(b) Midwives employed by voluntary organisations ...	1,229	369	110	—	—	—	—	1.7
(c) Midwives employed by Hospital Boards of Management	78	318	407	—	—	—	—	4.8
(d) Private practising midwives	—	—	—	—	159	—	—	—
(e) Totals	3,426	1,322	1,728	1,042	159	—	—	7.6

Note—Emergency cases under Section 14 (1) of the Midwives (Scotland) Act, 1951, should *not* be included in the cases in which a doctor has been “engaged.”

(v) *Medical Aid.*

Number of cases in which medical aid was summoned during the year under Section 14 (1) of the Midwives (Scotland) Act, 1951, by a Midwife :—

(i) for Domiciliary Cases	...	...	...	...	Total
(ii) for Institutional Cases	...	...	...	...	441

(vi) *Administration of Analgesics.*

(a) No. of domiciliary midwives in the area qualified to administer gas and air analgesia in accordance with the requirements of the Central Midwives Board for Scotland (including superintendents, non-medical supervisors of midwives, midwife teachers, midwives employed by the local health authority and by voluntary organisations, private practising midwives, and hospital midwives undertaking domiciliary cases under arrangements made by the local health authority and the Regional Hospital Board but <i>excluding</i> pupil midwives undergoing training on the district)	...	Total
		179

(1) No. in (a) employed on local health authority work	179
--	-----	-----	-----	-----	-----

(2) No. in (a) not employed on local health authority work	—
--	-----	-----	-----	-----	---

(b) No. of domiciliary midwives who received their training during the year	10
---	-----	-----	-----	-----	-----	----

(c) No. of sets of Apparatus for the administration of gas and air in use in the area at 31st December, 1953	...	35
--	-----	----

(1) No. in (c) in use by domiciliary midwives employed on local health authority work (including those in use by hospital midwives undertaking domiciliary cases)	...	35
---	-----	----

(2) No. in (c) in use by domiciliary midwives not employed on local health authority work	—
---	-----	-----	-----	-----	-----	---

(d) No. of sets on order at 31st December, 1953	—
---	-----	-----	---

(e) No. of cases in which gas and air was administered by midwives in domiciliary practice during the year (including cases attended by hospital midwives undertaking domiciliary cases)	3,086
--	-----	-----	-----	-----	-------

(1) When doctor was not present at delivery	...	723
---	-----	-----

(2) When doctor was present at delivery	...	1,228
---	-----	-------

(3) When doctor was present during labour	...	578
---	-----	-----

(4) Midwife alone	557
-------------------	-----	-----	-----	-----	-----

(f) No. of cases in which pethidine was administered by midwives in domiciliary practice during the year (including cases attended by hospital midwives undertaking domiciliary cases)	3,237
--	-----	-----	-----	-----	-------

(1) When doctor was not present at delivery	...	433
---	-----	-----

(2) When doctor was present at delivery	...	1,777
---	-----	-------

(3) When doctor was present during labour	...	705
---	-----	-----

(4) Midwife alone	322
-------------------	-----	-----	-----	-----	-----

(vii) No. of cars in use by midwives at 31st December, 1953	...	—
---	-----	---

Fees to doctors attending emergency cases amounted to £740 16s. 6d.

CASES OF PUERPERAL FEVER OCCURRING IN THE PRACTICE OF MIDWIVES.

Year	Midwives	Cases Notified
1939	45	62
1940	42	61
1941	31	41
1942	24	31
1943	29	39
1944	31	39
1945	31	38
1946	28	42
1947	42	63
1948	27	33
1949	14	14
1950	13	15
1951	8	9
1952	5	5
1953	7	8

MATERNITY BUNDLES.

Bundles to the number of 405 were supplied, in respect of which part payment received amounted to £2 14s. 4d.

MATERNITY OUTFITS.

At the end of 1949 the Corporation decided to issue free of charge to all women having a domiciliary confinement and who applied for one a maternity outfit for the confinement. The outfits are obtained from a wholesale firm and each is sterile and in a sealed cardboard carton. The cost of each outfit during 1953 was 15s. 9d. During the year 7,818 were issued.

OPHTHALMIA NEONATORUM.

The number of notified cases of ophthalmia neonatorum again showed a decrease, there being only 100 compared to 142 in 1952 and 186 in 1951.

The cases were analysed with the undernoted result :—

Ophthalmia Neonatorum	...	...	...	...	30
Purulent conjunctivitis	...	...	...	...	47
Simple conjunctivitis	...	...	...	...	11
Dacryocystitis	...	...	...	...	1
Stye	...	...	...	...	1
No abnormality detected	...	...	...	...	10
					<u>100</u>

All cases were classified according to age of onset :—

— 12 hours	...	...	...	...	...	9
— 4 days	...	...	...	...	...	22
— 8 days	...	...	...	...	...	22
+ 8 days	...	...	...	...	...	37
N.A.D.	...	...	...	...	...	10
						<u>100</u>

The attendance at birth was as follows :—

General practitioners	...	...	...	...	29
Institutions	...	...	...	...	48
Institution nurses	...	...	...	...	5
Midwives	...	...	...	...	18
					<hr/> 100 <hr/>

A bacteriological examination was made in all cases with the following result :—

gram pos. diplococci	...	...	...	...	24
diphtheroids	...	...	...	...	20
gram pos. diplococci and diphtheroids	...	...	...	...	14
gonococci	...	...	...	...	5
Koch weeks	...	...	...	...	1
streptococci	...	...	...	...	2
staphylococci	...	...	...	...	1
coliform bacilli	...	...	...	...	1
gram neg. diplococci (not g.c.)	...	...	...	...	2
no organisms	...	...	...	...	17
no material	...	...	...	...	13
					<hr/> 100 <hr/>

Twenty-three cases were admitted to Baird Street for indoor treatment, five of which were positive. Treatment with antibiotics proved efficacious. In all cases the condition cleared up rapidly and there was no impairment of vision. In addition, seven cases which had tended to show persistent discharge attended as out-patients at the hospital and made 45 visits in all. The remaining cases were treated by health visitors who made 529 visits. In addition to the above, one case was admitted from Ayrshire. This proved to be a dacryocystitis and was a Koch Weeks infection. The Wasserman test was carried out in the hospital cases and all were negative.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year there were registered 202 cases of puerperal fever and 126 cases of puerperal pyrexia compared with 208 and 105 respectively for the preceding year. All the cases of puerperal fever and all but 16 pyrexias were removed to hospital or other institution.

Deaths associated with cases of puerperal fever *notified* during the year numbered 2. This is equal to a fatality rate of 0.99 per cent. compared with 3.4 for the preceding year.

GLASGOW: INFECTIOUS DISEASE—CASE RATES PER MILLION
1933—1953

	YEAR.																				
	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
A.—Notifiable—																					
Typhus Fever	124	41	169	200	65	52	54	320	73	63	40	28	35	40	33	14	9	16	48	20	17
Enteric Fever and Paratyphoid B	2	2	4	2	4	3	5	—	—	2	4	4	—	—	5	7	7	3	6	4	7
Continued and Undefined Fever	499	569	542	460	492	483	398	384	33	359	382	309	264	280	284	229	176	140	212	191	186
Puerperal Fever	359	293	233	203	303	264	276	233	252	200	253	189	187	176	131	112	105	103	96	97	116
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	26	—	—	2	—	—	—	—	16	—	—	—
Smallpox	7,701	5,473	3,711	3,960	5,153	3,703	2,711	1,715	1,752	2,837	2,853	3,130	3,131	3,145	3,270	3,584	2,138	1,742	2,102	2,495	1,762
Scarlet Fever	2,178	2,435	2,272	1,801	2,143	2,596	2,877	4,751	3,698	3,045	2,674	2,178	1,805	1,336	460	262	141	79	123	79	46
Diphtheria and Membranous Group	1,027	1,021	932	899	955	886	763	600	615	668	650	517	481	441	434	440	281	259	207	218	203
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	142	87	76	68	97	81	74	418	374	181	113	118	119	208	121	89	93	105	116	93	113
Cerebro-spinal Fever	818	738	691	649	732	711	653	565	497	614	570	487	300	312	280	241	121	160	171	131	90
Ophthalmia Neonatorum	18	16	17	12	14	14	9	6	9	9	3	10	7	13	1	4	—	5	2	3	5
Trachoma	12	7	13	12	27	7	5	3	6	4	8	3	4	5	4	5	4	1	2	4	2
Acute Encephalitis Lethargica	6	—	—	—	1	1	—	1	1	2	1	1	—	2	17	1	2	5	1	—	1
Acute Poliomyelitis	31	8	2	21	1	38	4	30	43	5	6,163	5,204	4,468	5,638	272	5	26	26	50	32	46
Acute Primary Pneumonia	4,454	5,934	5,302	5,359	5,391	4,882	3,221	5,049	5,664	4,826	6,163	5,204	4,468	5,638	4,947	4,331	4,126	3,244	3,403	4,815	3,609
Acute Influenzal Pneumonia	320	276	372	191	517	105	209	282	144	83	173	82	71	201	81	32	70	38	115	114	138
*Whooping Cough	5,920	5,457	1,148	3,903	8,018	3,776	5,776	801	10,059	1,076	5,119	3,381	2,513	2,499	5,002	1,562	3,620	4,938	6,673	1,296	6,083
Malaria	17	22	12	13	13	10	10	46	23	26	14	15	23	60	29	26	13	8	13	27	22
Dysentery	65	61	124	220	251	240	149	333	292	250	401	1,153	1,351	524	254	1,080	1,285	2,176	1,422	2,110	2,509
Infective Jaundice	1	—	—	2	3	1	1	1	1	—	3	—	4	—	1	2	7	3	1	2	2
Anthrax	—	—	—	—	1	3	—	—	—	2	—	1	—	1	1	—	1	4	—	—	—
Pulmonary Tuberculosis	1,485	1,513	1,616	1,515	1,522	1,599	1,440	1,747	1,892	2,128	2,544	2,527	2,420	2,575	2,535	2,545	2,595	2,244	2,025	2,083	2,182
Other Forms of Tuberculosis	730	622	620	654	591	640	513	642	605	654	673	615	509	466	469	342	358	339	326	277	272
B.—Not Notifiable—																					
Measles	868	22,622	821	18,576	2,090	14,492	1,318	10,095	1,477	7,604	7,184	5,831	5,509	4,887	3,878	7,457	3,698	6,272	3,934	6,323	4,496
German Measles	1,683	163	387	1,502	190	447	3,470	598	214	385	3,618	658	542	1,001	1,032	201	219	3,027	588	242	1,599
Chickenpox	6,266	5,157	5,310	6,300	5,727	5,805	3,533	1,874	3,748	7,549	5,424	6,885	4,831	4,173	5,091	6,305	3,394	6,426	7,390	5,474	6,771
Others—																					
Mumps	13	20	63	70	45	42	25	301	120	110	57	146	69	62	111	55	41	43	83	57	135
Pemphigus Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	34,739	52,537	30,437	46,595	31,346	40,881	27,514	30,765	31,893	32,708	38,626	33,492	28,681	32,317	28,746	29,031	27,569	31,656	29,111	36,217	30,416

* Whooping Cough became notifiable as from 1st January, 1950

SECTION IV.

INFECTIOUS DISEASE.

There were more cases of infectious disease in 1953, 33,003 compared with 28,493 in 1952, due mainly to the increased prevalence of whooping cough, chickenpox and dysentery. The increase in the first two calls for no special comment as they are following the usual pattern of periodic prevalence. Dysentery, on the other hand, has shown a disturbing increase in recent years and with the exception of a slight recession in 1951 has risen steadily and rapidly since 1947. The number of cases for each year from 1947 onwards compared with the incidence of enteric and paratyphoid is as follows :—

	1947	1948	1949	1950	1951	1952	1953
Dysentery	277	1,178	1,401	2,372	1,550	2,293	2,722
Enteric and Paratyphoid ...	36	15	10	18	52	22	18

The relative incidence of dysentery and those other infectious diseases which were responsible for more than a 1,000 cases in 1953 was as follows :—

1953	Percentage of Total
Chickenpox	22·3
Whooping-cough	20·0
Measles	14·8
Primary Pneumonia	11·9
Dysentery	8·2
Pulmonary T.B.	7·2
Scarlet Fever	5·8
German Measles	5·2
*Other Infectious Diseases	4·6
	<hr/> 100·0 <hr/>

* Those with less than 1,000 cases.

In 1947 dysentery contributed only 0·88 per cent. of the 31,355 cases of infectious disease registered in that year.

There is indeed some reason to believe that the incidence is much greater than is shown by these figures. Elsewhere in this report the City Bacteriologist comments that the mildness of the disease is such that "there must be many more infections in the community than are detected, symptomless carriers and people who have only the slightest disturbance, for which they naturally do not seek advice".

The spread of this disease reveals the urgent necessity for improved standards of personal hygiene in the individual, especially in all those engaged in the handling and preparation of food, whether in the home or elsewhere. The habit of hand washing itself would go far to reduce much of the transient diarrhoeal and related illnesses which are becoming increasingly prevalent, and at the same time be a useful precaution against more serious infections.

The increased incidence of dysentery makes demands on hospital accommodation heavier than its comparative mildness warrants. Its mortality is at present low but the housing conditions of many of its victims are such that hospital isolation is essential. During 1953, 1,771 (65 per cent.) dysentery cases were removed to hospital compared with 1,460 (60 per cent.) in 1952. In spite also of the increased demand for accommodation for whooping cough, in all fewer cases of infectious disease were removed to hospital during 1953, 12,231 compared with 13,048 in 1952. Included in this number were 2,773 cases removed to hospital and ultimately diagnosed as non-infectious: in 1952 this figure was 2,721.

Details of notifiable and non-notifiable diseases are given in Appendix Table XIV, while Appendix Table XV illustrates their seasonal prevalence. Appendix B includes the relative tables of admissions, dismissals and deaths in the four fever hospitals, together with a short report on the year's work.

IMMUNISATION CENTRE.

This centre situated at 20 Cochrane Street provides intending travellers from the West of Scotland with immunisation against yellow fever and certain other infectious diseases likely to be met with in a foreign country. Since the centre was established in 1947, 17,296 intending travellers have been inoculated against yellow fever, 3,579 being inoculated during 1953. These figures include the crews of several ships. In the case of a large crew where it is not feasible for them to attend at one time at the centre, arrangements are made for a medical officer and assistant to visit the ship and carry out the necessary inoculations on board.

In 1950 the services of the centre were extended to cover also inoculations against enteric, plague, typhus, cholera and smallpox, where the traveller's own doctor was not available. In 1953, 1,006 persons made 1,870 attendances for inoculations against these diseases. Thus during the year under review 2,585 travellers and members of ship's crews utilised the services of the centre.

SMALLPOX AND VACCINATION.

There was no case of smallpox during 1953. Compulsory vaccination or declaration of conscientious objection ceased with the coming into operation on 5th July, 1948, of the National Health Service (Scotland) Act. Provision, however, was made for the notification of vaccination by medical practitioners, and in 1953 notifications were received of 4,858 primary vaccinations and 3,524 re-vaccinations. In addition 3,455 primary vaccinations were done at Child Welfare Clinics, so that altogether, 8,313 primary vaccinations were done during the year. This compares with 8,101 in 1952 and 8,745 in 1951. No comparison is possible in respect of 1950 because of the mass vaccination of the population in that year following an outbreak of smallpox in the city.

The proportion of children under one year vaccinated at the Child Welfare Clinics prior to and since the inception of the present arrangements under the National Health Service are as follows :—

				No.	Percentage of Births
1947	...	...	...	4,928	19.1
1948	...	...	...	3,499	15.7
1949	...	...	...	2,644	12.6
1950	...	...	...	Figures not comparable.	
1951	...	...	...	3,193	15.9
1952	...	...	...	3,055	15.0
1953	...	...	...	3,455	17.1

Figures for 1953 show an encouraging increase in the number of children vaccinated, but as a proportion of the births this is still too low in an age of air travel which daily brings to these shores travellers from Far Eastern and other countries where smallpox is rife.

The age distribution of the vaccinations done in 1953 was as follows :—

			Primary	Re-vaccinations
Under 5 years	...	...	7,885	246
5 and over	...	...	407	3,209
Not stated	...	...	21	69
			<u>8,313</u>	<u>3,524</u>

LEPROSY.

Under the Public Health (Infectious Diseases) (Scotland) Amendment Regulations of 1951, this disease became compulsorily notifiable from 1st September, 1951. This means that every medical practitioner must notify the Medical Officer of Health of any case of leprosy coming to his notice.

This is a disease of rare occurrence in this country and such cases as have been found in Glasgow were foreign seamen or students from tropical countries where this disease is prevalent. In the past twenty years only five cases have come to the notice of this Department. There was no case notified during 1953.

MALARIA.

This disease, like smallpox and leprosy, is usually introduced into the city by servicemen returning from abroad or foreign visitors. During 1953 there were 24 cases as against 29 in 1952. Incidence in recent years was as follows :—

(Average) 1930-38	...	...	15
1939-45	...	...	24
1946-50	...	...	30
1951	...	...	14
1952	...	...	29
1953	...	...	24

All 24 cases were male, 21 being in the 20 to 25 age groups.

ENTERIC AND DYSENTERY.

Typhoid.—Only four cases were registered, including a woman aged 60 suffering from typhoid fever who was admitted to a general hospital in May from the Outer Hebrides. A boy aged 5 was registered from the Eastern Division in March and another, aged 1, from the South-Eastern Division in October. The father of the latter case was found to be a chronic faecal carrier of typhoid. He was a pedlar aged 41 who had come to Scotland from a city in Pakistan in June, 1952. He was not aware of ever having had typhoid fever.

Paratyphoid.—These infections were again few, 14 being registered. None was institutional in origin; and homes in all five Divisions were concerned. The largest grouping occurred in the South-Eastern Division. A boy aged 7 sickened in an urban tenement on 28th September. His two brothers aged 4 years and 2 years respectively fell ill ten days later; and a boy aged 1 in a neighbouring tenement seven days after them. Another familial group was registered from the Eastern Division in August, two sisters, aged 1 year and 3 years respectively, sickening within eleven days. The infection in June of a woman aged 30 who lived with her husband in a service-flat in the South-Eastern Division was traced to her mother aged 66. The latter lived at another address with her aged husband. She proved to be a chronic urinary and faecal carrier of paratyphoid; but her original illness could not be identified. All the year's cases were registered between May and October. Eight were females; and 9 were children between 1 and 7 years.

Bacillary Dysentery.—The number of cases registered was 2,722. This was even higher than the unprecedented total of the previous year. The Divisions most severely affected were the Eastern, the South-Eastern and the Northern; but no Municipal Ward was free from the infections. The wards of Dalmarnock, Calton and Gorbals each yielded over one hundred and fifty cases, as did Partick West in the Central Division. On the other hand there were fewer than ten cases each from Camphill, Langside, Cathcart and Kelvinside.

The table shows the number of domiciliary and of institutional cases and their seasonal incidence:—

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Home Infections ...	418	527	533	1,046	2,524
Institutional ...	58	36	43	61	198

The incidence thus reached a new and very high level in the last quarter. It has been continued into 1954 ; and a special analysis of cases was made for twenty weeks in the first half of the current year. The analysis revealed that the proportion of secondary to primary cases was much the same (48-50 per cent.) in families with their own w.c. and in those sharing a w.c. with other families. There was a suggestion, however, that other hygienic conditions associated with Social Class affect the occurrence of secondary cases. In families with their own w.c. the number of primary cases in Social Classes I-III exceeded those in Social Classes IV-V ; but the number of secondary cases in the former group was lower than in the latter, the ratios of secondary to primary cases being 43 per cent. and 53 per cent. respectively.

It has been found necessary to curtail the residence in hospital of mild cases admitted for social reasons and of more severe cases who have clinically recovered. This Department, however, is notified when cases are dismissed in an infective state ; and it remains our practice to seek bacteriological evidence of cure in all domiciliary cases, including those who have been treated in hospital. Bacteriological examination of contacts is also carried out on a large scale ; and the hospitals are requested to await bacteriological recovery before dismissing food-workers or home-contacts of food-workers and before dismissing patients to other institutions.

It is now as important as ever for the public to bear in mind the usefulness of the habit of handwashing ; for food handlers to realise the risks arising from diarrhoea in themselves or in their home-contacts ; and for the authorities in day nurseries and in residential institutions for children to continue to carry out as a routine the bacteriological examination of all children on admission or on re-admission. The bacteriological examination of children re-admitted to these institutions from Fever Hospitals is particularly important ; and the provision in Children's Homes of isolation accommodation for admissions is of great advantage.

The number of institutional cases was again low. They were derived from twenty different institutions. Forty-two cases came in the course of the year from a large general hospital and were mainly of the Sonne variety. A Residential Nursery, from which 37 cases were removed during the year, was the scene of an outbreak of Sonne dysentery between March and May. Two large general hospitals yielded 22 and 13 cases respectively ; and 14 cases and carriers came from a Children's Home where there were two small last-quarter outbreaks, one of Flexner and the other of Sonne dysentery.

The age distribution of the year's cases and their fatality are shown in the following table :—

	—1 years	—5 years	—15 years	—55 years	55+ years	Totals
Home Infections ...	202	1,247	604	391	80	2,524
Institutional ...	11	106	27	35	19	198
Deaths ...	—	1	—	—	3	4

These diseases therefore remain mild in spite of their increased infectivity ; but they may be dangerous to persons enfeebled by other diseases or by old age. They continue to be most prevalent among children ; especially among those under five years of age, including infants.

SCARLET FEVER.

In 1953 there were 1,912 cases registered compared with 2,712 during the preceding year. This is the second lowest incidence since 1940 when a large proportion of the child population had been evacuated from the City. The total number treated in hospital was 1,255, while 657 were nursed at home. Thus, approximately one-third of the cases of scarlet fever are now cared for at home, a proportion which would be even higher if the housing accommodation of the city permitted. The fact that fewer cases than ever are being admitted to hospital is very important considering the high cost of hospitalization and the difficulties occasioned by the nursing shortage.

The age distribution remains fairly constant, 36 per cent. of cases occurring in children under 5 years, 60 per cent. in school children between 5 and 15 years, and only 4 per cent. beyond the age of 15 years.

The seasonal incidence of the disease is shown in Appendix Table XV. The heaviest incidence was recorded in Ruchill Ward with 106 cases, followed by Woodside with 87 and Pollokshields with 80 cases.

This is the first year that it can be recorded that no deaths occurred in the City from scarlet fever. This is in keeping with the general trend of mortality, as in 1952, 1951 and 1950 only single deaths were recorded from this disease. These figures exemplify its continuing mildness, and are in marked contrast to the 301 deaths recorded in 1892, 281 deaths in 1915, and still more recently the 102 deaths which occurred during an excessive prevalence of the disease in 1932.

The abolition of mortality from scarlet fever has been noted both in this country and abroad. It has no doubt been influenced in general by better overall child care and the availability of modern powerful therapeutic remedies. Nevertheless, the vital factor is the reduced virulence of the organism itself, which in turn may depend upon cyclic changes of which very little is known.

ERYSIPELAS.

There was a slight decrease in the incidence of this disease during 1953, 220 cases compared with 237 in 1952. Female cases were again more numerous, 121 as against 99 males. In 1952, the respective figures were 135 and 102. There was one death.

The decline in mortality in recent years is as follows :—

Deaths				Deaths			
1929 ... ..	...	...	52	1951 ... ..	...	...	—
1930-39 (average) ...	...	...	46	1952 ... ..	...	...	2
1940-45 (average) ...	...	...	8	1953 ... ..	...	...	1
1946-50 (average) ...	...	...	6				

PUERPERAL FEVER AND PYREXIA.

As in previous years these conditions have been discussed in the section "Maternity and Child Welfare" (page 73). As a result of alterations in the International Classification of Causes of Deaths, deaths from these two infections no longer appear under separate heading in the "Short List" but are now included in the group "Complications of Pregnancy, Childbirth and the Puerperium."

DIPHTHERIA.

During 1953 the number of cases of diphtheria registered was 50, a decrease of 36 from the previous year. This figure is the lowest so far recorded and, in association with the fact that there were no deaths, makes it a remarkable year in the history of diphtheria in the City of Glasgow.

The following table showing the case incidence and mortality since 1940, the year when the intensive diphtheria immunisation campaign began, graphically represents the almost virtual conquest of the disease in the City at the moment :—

Year				Cases	Deaths
1940 ... ..	...	...	...	5,190	220
1941 ... ..	...	...	...	4,039	155
1942 ... ..	...	...	...	3,325	90
1943 ... ..	...	...	...	2,919	81
1944 ... ..	...	...	...	2,377	62
1945 ... ..	...	...	...	1,970	33
1946 ... ..	...	...	...	1,358	37
1947 ... ..	...	...	...	502	13
1948 ... ..	...	...	...	286	8
1949 ... ..	...	...	...	148	5
1950 ... ..	...	...	...	86	—
1951 ... ..	...	...	...	130	4
1952 ... ..	...	...	...	86	7
1953 ... ..	...	...	...	50	—

Of those affected with the disease 28 were males and 22 females, and no case occurred under the age of 2 years. The great majority of the cases, viz., 42 out of the 50, occurred in the non-immunised.

The case incidence of the disease this year is all the more noteworthy when account is taken of the fact that in the early months a localised outbreak occurred in the northern part of the City. During this outbreak 21 cases of diphtheria were notified in Ward 16, 3 in the latter part of January, 14 in February, 3 in March and 1 in April. In all cases a virulent mitis strain of *Corynebacterium diphtheria* was isolated. In controlling the outbreak throat and nose swabs were taken on repeated occasions from a single school class of average age 6 years, and from the various families in two tenement properties where more than one case had occurred. Eight of the cases were regarded as contact carriers, there being no manifest illness. The teacher of the class referred to, but not included in the above 21 cases as her home was in a different ward of the City, also became a temporary contact carrier, and closure of the class for a period became necessary. Nine cases, including the teacher, occurred in this class and one child was associated with a further 7 cases in the tenement property in which he lived, one case in his own home and 6 cases in another household. The last 5 cases booked lived in close proximity to one another though somewhat remote from earlier cases, but with the similarity of strain and the close association in time are to be regarded as part of the same outbreak. No deaths occurred.

The seasonal incidence of diphtheria is given in Appendix Table XV, and even with such low figures there is still a definite tendency for the disease to occur during the colder months of the year. The age distribution remains unchanged, 82 per cent. of the cases occurring in those of school age and under.

With regard to the distribution of the disease throughout the City no cases were registered this year in 21 wards. Apart from Ward 16 the remaining 15 wards showed a fairly uniform distribution of cases.

Immunisation.—The following table shows the progress of the immunisation campaign during the past seven years :—

	No. of Children Immunised				No. of Reinforcing Doses			
	—5 yrs.	+5 yrs.	Age not Stated	Total	—5 yrs.	+5 yrs.	Age not Stated	Total
1946	8,745	3,734	—	12,479	61	1,723	—	1,784
1947	10,560	10,143	—	20,703	32	4,809	—	4,841
1948	12,701	9,819	16	22,536	691	6,959	7	7,657
1949	11,403	6,106	—	17,509	65	24,283	—	24,348
1950	7,624	5,771	28	13,423	84	19,758	3	19,845
1951	11,864	7,832	1	19,697	130	23,851	—	23,981
1952	9,859	7,375	1	17,235	76	17,794	—	17,870
1953	11,053	8,074	—	19,127	95	21,657	—	21,752

Birthday letters are sent to parents of children who have reached their first birthday and to parents of toddlers known to Health Visitors to be unprotected.

	Letters Sent		Total	Number Immunised under 5 years of age
	Infants	Toddlers		
1946	5,686	5,814	11,500	8,745
1947	6,846	8,210	15,056	10,560
1948	7,490	8,972	16,462	12,701
1949	6,204	10,030	16,234	11,403
1950	5,044	8,371	13,415	7,624
1951	5,296	9,114	14,410	11,864
1952	4,462	7,720	12,182	9,859
1953	3,352	6,108	9,460	11,053

The figures for 1950 and 1951 are not comparable as those of 1950 are for only eight months of that year. Acute poliomyelitis was very prevalent from July to October, 1950, and the immunisation campaign was discontinued, as a precautionary measure, during that period.

The number of children immunised during 1953 showed a considerable increase on the 1952 figure, 19,127 as against 17,235. Most of the increase was in the under five age-group, of whom 11,053 were immunised in 1953 compared with 9,859 in 1952. By the end of 1953, therefore, less than half the population under five years of age had been given some measure of protection from this disease. Such small numbers would not, in the event of an epidemic, be sufficient to check its course or abate its severity.

The City Bacteriologist in Section IX of this report comments on the much reduced prevalence in 1953 of the more virulent "Gravis" strain of the diphtheria bacillus but so long as this and other potentially virulent strains persist, there can be no relaxation in the effort to bring this disease fully under control, and any abatement of the immunisation campaign at this stage would be fraught with serious consequences.

DISEASES OF THE CENTRAL NERVOUS SYSTEM.

Cerebro-spinal Fever.—There were more cases of this disease in 1953, 123 compared with 101 in 1952, and almost equally divided between the sexes. Ninety-seven were children in the following age groups :—

		—1 year	—2 years	—5 years
Males ...	...	26	11	12
Females	...	29	9	10

The cases were fairly evenly distributed throughout the City ; the two wards with the highest incidence were Dalmarnock with 9 cases and Ruchill with 8. The seasonal incidence was as follows :—

		1953	1952	1951	1950
1st Quarter ...	...	38	35	43	34
2nd Quarter ...	...	32	20	29	33
3rd Quarter ...	...	24	16	22	20
4th Quarter ...	...	29	30	32	28
		<u>123</u>	<u>101</u>	<u>126</u>	<u>115</u>

On the Short List of Causes of Death this infection now appears under the heading " Meningococcal Infections ". During 1953, 12 deaths were so recorded, compared with 10 in 1952 and 15 in 1951.

POLIOMYELITIS.

During the year 1953 the incidence of poliomyelitis remained on a moderate scale similar to the years 1952 and 1951.

The figures which follow include as non-paralytic poliomyelitis all cases of lymphocytic meningitis of unknown aetiology, the seasonal and age incidence of which corresponds closely to that of paralytic poliomyelitis. Not infrequently contact between a paralytic case and a lymphocytic meningitis case can be traced. Two such incidents are described below. It is estimated that any cases of lymphocytic meningitis erroneously included as poliomyelitis are more than compensated for by the number of missed cases of non-paralytic poliomyelitis so that the total incidence is not overstated.

On this basis the figures for 1953 were—Notifications 121, confirmed cases 69, paralytic cases 31, non-paralytic cases 38. The considerable excess of notifications consisting of suspected cases which were not confirmed is again noticeable. The 52 suspected cases were all found to be suffering from some other condition. Some were nervous conditions of one type or another, while the diagnosis in three cases was acute rheumatism and in four osteomyelitis. It is not at all simple for the practitioner to arrive at a correct diagnosis in early cases seen under difficult circumstances in the home, and in many cases considerable hospital investigation was necessary before the final diagnosis could be arrived at.

The number of paralytic cases is the important figure, indicating the mark left by the disease on the community. For comparison, the numbers since the 1947 epidemic are as follows :—

1947	...	...	262	1950	...	...	212
1948	...	...	6	1951	...	...	31
1949	...	...	27	1952	...	...	25
			1953	...	...	...	31

The fairly constant level of recent non-epidemic years can be seen.

There were two deaths from the disease, one an adult female of 28 years and the other a female child of 2 years. The latter was the only case during the year requiring treatment in a respirator.

The cases were sub-divided according to their month of onset as follows :—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Paralytic	...	—	—	1	—	2	2	4	10	5	3	4
Non-paralytic	2	—	—	3	2	7	7	1	7	7	2	—
Total	...	2	—	1	3	2	9	9	5	17	12	4

The seasonal trend corresponds closely with dysentery and food poisoning. The disease practically disappears during the first few months of the year and reaches its maximum in the summer or autumn.

Tabulation according to age and sex gave the following :—

		—1	1-2	2-5	5-10	10-15	15—	Total
Paralytic	... { M	1	2	7	—	4	—	14
	... { F	2	3	4	1	2	5	17
Non-paralytic	... { M	1	—	7	7	5	6	26
	... { F	—	—	1	2	2	7	12
All cases	... { M	2	2	14	7	9	6	40
	... { F	2	3	5	3	4	12	29

It will be noticed that there was a small excess of females over males in the paralytic group, while males were in the majority among non-paralytic cases.

It was found that 16 of the 31 paralytic cases were under 3 years. The disease thus tended to justify its old name of infantile paralysis. The last epidemic year was 1950, so that the majority of the paralytic victims of 1953 had not lived through an epidemic year. Might it be that the older children and young adults of Glasgow have developed a considerable herd immunity as a result of recent epidemics? It is encouraging to think that this may be so. The naturally acquired immunity of the population remains at present the main barrier against the ill effects of the infection in those who meet it.

The geographical distribution of cases in the city was of interest. It was found that the most heavily affected ward was Yoker with 8 cases. This ward borders those parts of Dunbartonshire in which a considerable prevalence of the disease occurred. The Central Division accounted for a further 20 cases, while Hutchesontown and Govanhill recorded 9. Among the areas little affected were the seven Eastern wards which only had 4 cases.

Considering the small numbers it is remarkable how many cases show a possible link with another case. A doctor who contracted the illness had been in contact with a case in hospital, undiagnosed at the time of contact. A nurse developed lymphocytic meningitis who had, at the relevant time, been nursing poliomyelitis. Two brothers sickened at an interval of four months, the first with lymphocytic meningitis and the second with paralytic poliomyelitis. A teacher and pupil, close contacts, sickened with paralytic poliomyelitis at about the same time and probably were both infected by an unknown third party. Finally, there were three cases, all paralytic, in which there was a very strong suggestion of contact which was not however direct but through missed cases or carriers who were undiscovered.

Out of the total of 31 paralytic cases, 29 of whom survived, 9 were discharged straight to their homes from hospital, and 20 were transferred for orthopaedic treatment as in-patients.

The toll exacted by poliomyelitis in Glasgow in 1953 was small, and may be summed up as follows : 2 deaths, 4 persons crippled in both legs ; 6 who will probably retain noticeable weakness in one leg, and 1 with a weak arm. Without minimising the serious effects on these individual lives, it is suggested that the occurrence of a suspected case of poliomyelitis does not justify the stirring up of alarm in the community which newspaper reports frequently arouse. Even in the absence of declared cases of the disease the infection is constantly present in Glasgow and elsewhere, and a state of anxiety does nothing to prevent its spread.

ENCEPHALITIS.

Encephalitis Lethargica.—There have been only sporadic cases of this infection since the small outbreak which occurred in 1937. During 1953, there were two cases, one under 1 year and one under 35 years of age, both females. There were two deaths during the year.

Post Encephalitis Lethargica.—A group of cases, 26 in number, the remaining survivors of a Glasgow Epidemic which affected 70 persons in all, has been under the continuous supervision of Dr. Ashie Main since 1923, and the following tables show the physical capacity of these cases as at the beginning of 1954 :—

PHYSICAL CONDITION.

			Males	Females	Total
Fit for housework	...	...	—	8	8
Fit for employment	...	...	7	3	10
Unfit but going about	...	...	1	—	1
Bedridden at home	...	...	1	1	2
Cases in General Hospital	...		2	—	2
Cases in Mental Hospital	...		2	—	2
Cases untraced	...	...	1	—	1
			<u>14</u>	<u>12</u>	<u>26</u>

There has been little change in the condition of these patients in recent years. There were no deaths among this group in 1953.

			Spring 1953	Spring 1954
Group I.	Recovery complete	...	4	4
Group II.	Recovery incomplete :—			
	Class A. Mental Retardation	...	2	2
	Class B. Mental Instability	...	1	1
	Class C. Nervous Instability	...	11	11
			—	14
Group III.	Perversion of Conduct	...	—	—
Group IV.	Parkinsonians :—			
	Class A. Normal Mentality	...	2	2
	Class B. Abnormal Mentality	...	6	6
			—	8
Group V.	Died	...	—	—
			<u>26</u>	<u>26</u>

MEASLES.

Registered cases of measles in 1953 numbered 4,878, of which 1,876 were under 5 years and 2,838 between 5 and 10 years. Four hundred and ninety-nine cases were treated in hospital, 21·4 per cent. of the cases under 5 years, and 3·3 per cent. of the cases over 5 years.

One half of the registered cases attended the infant school and 96 per cent. were primary cases infected outwith their own homes, in 53 per cent. a previous case having been reported at school. Of the children under 5 years 77 per cent. were primary cases and in 57 per cent. no known contact with a previous case was established.

There were 8 deaths, 4 under one year, 2 between one and two years, and 2 between two and five years. The following table shows the fatality rate of measles since 1950 :—

Period	Registered Cases		Deaths	Fatality per cent.
1950	6,837		15	0.22
1951	4,287		7	0.16
1952	6,872		6	0.09
1953	4,878		8	0.16

Again maximum incidence occurred in the first half of the year, the peak being in April with 1,228 cases.

QUARTERLY INCIDENCE OF MEASLES 1951, 1952 AND 1953.

	1951		1952		1953	
	Registered Cases	Per-centage of Total	Registered Cases	Per-centage of Total	Registered Cases	Per-centage of Total
1st Quarter ...	1,127	26.3	2,897	42.2	1,796	36.8
2nd Quarter ...	2,112	49.3	3,403	49.5	2,831	58.0
3rd Quarter ...	290	6.8	143	2.1	132	2.7
4th Quarter ...	758	17.7	429	6.2	119	2.4
	<u>4,287</u>	<u>100.0</u>	<u>6,872</u>	<u>100.0</u>	<u>4,878</u>	<u>100.0</u>

PROPORTIONATE MORTALITY UNDER 5 YEARS.

Period	Deaths from all Causes under 5 years			Measles Deaths under 5 years	Proportionate Mortality per cent.
1950	1,069			14	1.31
1951	1,093			7	0.64
1952	970			6	0.62
1953	841			8	0.95

Rubella or German Measles.—There were 1,735 cases of rubella in 1953 compared with 263 in 1952, 641 in 1951 and 3,299 in 1950. Seasonal incidence was heaviest in March, April and May when measles also was most prevalent. The age distribution was as follows :—

Age	—5	—10	—15	—35	—45	Total
No. of Cases...	148	1,349	196	40	2	1,735

Thirty-seven of the adult cases were women of child-bearing age. The association between rubella in pregnant women and congenital malformations in the children they bear is the subject of a special investigation undertaken in 1951 by the Maternity and Child Welfare Department and referred to in the relative section of the Annual Report for that year. It will be some time before the result of this investigation is known.

WHOOPING-COUGH.

During the year 6,600 notifications of whooping-cough were received. There were 3,641 cases under 5 years and 2,815 between 5 and 10 years. Four hundred and fifty cases, 6·8 per cent. of total, were treated in hospital, 11·2 per cent. of the cases under 5 years, and 1·4 per cent. of the cases over 5 years.

Rather more than one-third of cases were of infant school age (2,363 cases, 35·8 per cent. of total), and of these, 92·8 per cent. (2,192 cases) were primary cases having been infected outwith their own immediate family, in 31·1 per cent. (736 cases) a previous case having been noted at school. Of the children under school age, about three-quarters (2,799 cases, 76·9 per cent.) were primary cases and in 79·0 per cent. (2,212 cases) of these no known contact with a previous case was established.

Fifteen deaths occurred during the year, 7 under six months, 2 between six and twelve months, 5 between one and two years, and 1 between two and five years.

Period	Registered Cases	Deaths	Fatality per cent.
1950	5,383	13	0·24
1951	7,272	25	0·34
1952	1,409	3	0·21
1953	6,600	15	0·23

(Nine deaths occurred in 423 children notified under one year, giving a fatality per cent. under one year of 2·13.)

The incidence of whooping-cough was highest in the second quarter of the year and lowest in the fourth quarter. Notifications steadily increased during the first half of the year to reach a maximum in June with 994 cases.

QUARTERLY INCIDENCE OF WHOOPING-COUGH 1951, 1952 AND 1953.

	1951		1952		1953	
	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total	Notifi- cations	Per- centage of Total
1st Quarter ...	4,385	60.3	475	33.7	1,321	20.0
2nd Quarter ...	2,169	29.8	443	31.4	2,833	42.9
3rd Quarter ...	397	5.5	236	16.7	1,628	24.7
4th Quarter ...	321	4.4	255	18.1	818	12.4
	<u>7,272</u>	<u>100.0</u>	<u>1,409</u>	<u>100.0</u>	<u>6,600</u>	<u>100.0</u>

PROPORTIONATE MORTALITY UNDER 5 YEARS.

Period	Deaths from all Causes under 5 years			Deaths from Whooping-cough under 5 years	Proportionate Mortality under 5 years per cent.
1950	1,069	13	1.22
1951	1,093	24	2.20
1952	970	3	0.31
1953	841	15	1.78

CHICKENPOX.

Chickenpox was more prevalent in 1953, when 7,347 cases were registered compared with 5,949 in 1952. The incidence of this disease in recent years is shown as follows :—

1930-39 (average)	...	...	...	6,354
1940-49 (average)	...	...	...	5,377
1950	...	...	...	7,004
1951	...	...	...	8,053
1952	...	...	...	5,949
1953	...	...	...	7,347

Cases are removed to hospital only in special circumstances, e.g., when occurring in institutions, children's homes, etc. During 1953, 190 cases were removed to hospital. The disease is probably much more prevalent than the bookings indicate, for it is mostly on information obtained from school attendance officers that cases are registered. The distribution throughout the City was as follows:—

East	...	...	...	...	1,637
North	...	...	...	...	1,883
Central	...	...	...	...	800
South-East	...	...	...	...	1,148
South-West	...	...	...	...	1,767
Institutions	...	...	...	...	112
					<u>7,347</u>

The wards chiefly affected were Shettleston and Tollcross (420 cases), Ruchill (414), Govan (365), Kinning Park (345), Craigton (304), Townhead (282), Mile-End (280) and Fairfield (280). Seasonal incidence followed much the same course as in other years, and as in 1952 cases were more numerous in January. (The monthly incidence is shown in Table XV of the Appendix.)

DIARRHOEA AND ENTERITIS.

Mortality from this cause shows little change from the previous year. During 1953 there were only 49 deaths all children under one year of age (2 per 1,000 births). Mortality in infants under a year is greater among males as the following table indicates:—

	Males		Females		Total	—1 year per 1,000 Births
	—1 year	—2 years	—1 year	—2 years		
1945	225	16	138	6	363	12
1946	166	6	117	6	283	12
1947	339	5	221	9	574	22
1948	156	5	86	3	250	11
1949	100	13	57	6	176	7
1950	50	2	39	3	94	4
1951	37	2	27	1	67	3
1952	42	1	24	1	68	2
1953	27	—	22	—	49	2

Flies play an important part in the spread of this disease, so that any factor which results in a reduction in the fly population tends to limit its extent. Weather conditions are naturally very important, hot dry summers encouraging the breeding of flies. The following table shows the deaths occurring each month and the average temperature, compared with those of the previous year. In 1953 though the monthly temperatures were considerably above the average the summer was wet with the second heaviest rainfall of the year occurring in July and sunshine less than normal. The Department's fly control unit has also been particularly active in recent years. These factors combined with active health propaganda have brought about a marked reduction in the morbidity and mortality from this disease.

NUMBER OF DEATHS UNDER 1 YEAR ACCORDING TO MONTH OF DEATH.

		1953		1952				1953		1952	
		Deaths	Temp.	Deaths	Temp.			Deaths	Temp.	Deaths	Temp.
January	8	38.7	8	32.5	July	...	6	57.7	4	59.3	
February	4	40.4	3	38.1	August	...	2	58.5	5	57.9	
March...	7	42.3	6	42.5	September		4	55.5	3	50.4	
April ...	4	43.0	11	47.9	October ...		7	48.7	4	45.9	
May ...	3	53.9	4	53.6	November		5	45.5	6	36.9	
June ...	5	57.7	6	54.6	December		3	41.6	6	36.4	

PEMPHIGUS NEONATORUM.

There were 55 cases during 1953 compared with 12 in 1952 and 32 in 1951. Male cases numbered 31 as against 24 females.

RABIES.

No cases of rabies is known to have occurred, but throughout the year numerous instances of persons having been bitten by dogs or other animals were reported by the police for investigation.

During 1953, 357 persons were bitten by dogs, 15 seriously enough to require stitching of the wound. This compares with 305 in 1952, 380 in 1951 and 411 in 1950.

TRACHOMA.

During the year six new cases were notified as suffering from trachoma. In the table below is shown the number of cases notified and the number verified each year for the past ten years.

Year				No. of New Cases Notified	Definite	Doubtful
1944	...	...	...	12	12	—
1945	...	...	...	13	13	—
1946	...	...	...	14	13	1
1947	...	...	...	1	1	—
1948	...	...	...	4	3	1
1949	...	...	...	—	—	—
1950	...	...	...	8	8	—
1951	...	...	...	2	2	—
1952	...	...	...	5	3	2
1953	...	...	...	6	4	2

One case died and one was discharged well, thus the total number of cases on the register at the end of 1953 was 103 as compared with 101 at the end of 1952.

NUMBER OF CASES ON REGISTER.

Year				Definite Cases	Doubtful Cases	Total
1944	...	...	...	142	6	148
1945	...	...	...	145	6	151
1946	...	...	...	144	6	150
1947	...	...	...	133	3	136
1948	...	...	...	116	1	117
1949	...	...	...	106	—	106
1950	...	...	...	114	—	114
1951	...	...	...	108	—	108
1952	...	...	...	99	2	101
1953	...	...	...	103	—	103

Patients attending the clinic made a total of 1,123 attendances and during the same period the nurse made 165 home visits. No home contacts developed the disease during the year. Three patients were treated in Stobhill Hospital.

INFECTIVE JAUNDICE.

During the year three notifications of Leptospirosis were sent to this Department from hospitals within the City, but only one of the cases was resident within the City boundaries.

This case, a man of 51 years, was admitted to an infectious disease hospital in October, 1953, as a case of Continued Fever. The illness was described as similar to an influenzal chill. The stools were noted to be dark and the urine was concentrated. Blood was submitted to the Bacteriologist for the Schuffner Test and the first sample was positive to a titre of 1/100. A further sample submitted one week later was positive to a titre of 1/2,000. The diagnosis of Leptospirosis was thus established although this case never had jaundice. The man in question was a pig-breeder and his establishment appeared to be well conducted.

LEPTOSPIRO CANICOLA INFECTION.

The Department obtained information about three cases of this disease during 1953.

One of these, a Veterinary Surgeon, was an accidental infection, the result of a broken culture bottle. In this case the organism was recovered from the blood.

The other two cases were proved by agglutination tests and both had a meningeal type of illness. In one case the diagnosis was suggested by a Veterinary Surgeon as he had diagnosed the disease in the patient's dog.

ANTHRAX.

One case of Anthrax was notified to the Department during 1953.

The patient, a man of 50 years of age, developed an eschar on the right side of the forehead associated with marked oedema of the forehead, eye and face. He was admitted to a fever hospital and the diagnosis was confirmed bacteriologically. This man was employed as a dock-labourer and had as part of his duties the cleaning of cattle-boats. Enquiries, however, failed to reveal the source of this man's infection.

SCABIES.

During the year under review a reduction has occurred in the number of families affected although the total number of cases involved has increased slightly. Throughout the City 354 cases occurred in 209

families. The number of families involved is seven less than last year, but the number of cases has increased by 36. The following table shows the number of families and cases occurring in each of the Public Health Divisions.

Division	No. of Families	No. of Cases
Central	22	24
Northern	51	128
Eastern	67	95
South-Eastern	36	66
South-Western	33	41
Total	<u>209</u>	<u>354</u>

RESPIRATORY DISEASE OTHER THAN TUBERCULOSIS.

There were 3,916 notifications of primary pneumonia and 150 of influenzal pneumonia during 1953.

The following table shows the notifications of primary pneumonia received, the number and percentage treated in hospital.

Age in years	Notifications of Primary Pneumonia	Number Treated in Hospital	Percentage Treated in Hospital
Under 1 Year	436	361	82.80
1-5 Years	655	587	89.62
5-45 Years	1,353	1,135	83.89
45-65 Years	870	737	84.71
Over 65 Years	602	425	70.60
All Ages	<u>3,916</u>	<u>3,245</u>	<u>82.87</u>

Of the 150 cases of influenzal pneumonia notified, 48 were treated in hospital.

While some 35 per cent. of notifications of primary pneumonia and 35 per cent. of cases treated in hospital were between 5 and 45 years, these ages accounted for only 7.9 per cent. of deaths from pneumonia and 4.5 per cent. of the combined deaths from pneumonia and bronchitis.

NOTIFICATIONS OF PRIMARY PNEUMONIA.

	Male Notifi- cations	Per cent. of Total	Female Notifi- cations	Per cent. of Total	Notifi- cations Both Sexes	Per cent. of Total
Under 1 Year ...	265	11.6	171	10.5	436	11.1
1-5 Years ...	386	16.9	269	16.5	655	16.7
5-45 Years ...	726	31.7	627	38.6	1,353	34.6
45-65 Years ...	579	25.3	291	17.9	870	22.2
Over 65 Years...	334	14.6	268	16.5	602	15.4
Totals ...	2,290	100.0	1,626	100.0	3,916	100.0

Notifications of primary pneumonia and of influenzal pneumonia were heaviest in the first quarter of the year and lightest in the third quarter, as were the deaths, including those from bronchitis.

QUARTERLY INCIDENCE OF PRIMARY PNEUMONIA NOTIFICATIONS AND DEATHS,
OF INFLUENZAL PNEUMONIA NOTIFICATIONS AND DEATHS,
AND OF DEATHS FROM BRONCHITIS.

Period of Time	Primary Pneumonia				Influenzal Pneumonia				Bronchitis	
	Notifi- cations	Per cent. of Total	Deaths	Per cent. of Total	Notifi- cations	Per cent. of Total	Deaths	Per cent. of Total	Deaths	Per cent. of Total
1st Quarter ...	1,641	41.9	181	42.3	118	78.7	60	81.1	308	49.1
2nd Quarter ...	831	21.2	86	20.1	14	9.3	8	10.8	115	18.3
3rd Quarter ...	527	13.5	69	16.1	3	2.0	—	—	67	10.7
4th Quarter ...	917	23.4	92	21.5	15	10.0	6	8.1	137	21.9
Totals ...	3,916	100.0	428	100.0	150	100.0	74	100.0	627	100.0

The death rate per million for respiratory disease other than tuberculosis for 1953 was 1,138, compared with 1,356 in 1952 and 1,440 in 1951. The lowest death rate recorded was 824 in 1948.

DEATHS FROM RESPIRATORY DISEASE OTHER THAN TUBERCULOSIS,
1946-1953.

Year	Pneumonia and Bronchitis	Influenza	Other Respiratory Diseases
1946 ...	1,055	160	153
1947 ...	1,118	82	144
1948 ...	738	37	140
1949 ...	932	131	142
1950 ...	1,205	57	137
1951 ...	1,268	183	118
1952 ...	1,222	119	134
1953 ...	1,055	74	106

There was a decrease in the recorded deaths from pneumonia and bronchitis from 1952 of 167, 65 male and 102 female, in the male deaths mainly in ages over 45 years.

AGE INCIDENCE OF DEATHS FROM PNEUMONIA AND BRONCHITIS, 1953.

(The corresponding figures for 1952 are given in parenthesis.)

	Male Deaths				Female Deaths				Deaths—Both Sexes			
	Deaths		Per cent. of Total		Deaths		Per cent. of Total		Deaths		Per cent. of Total	
Under 1 Year ...	45	(50)	6.8	(6.9)	25	(37)	6.3	(7.4)	70	(87)	6.6	(7.1)
1-5 Years ...	10	(9)	1.5	(1.2)	4	(7)	1.0	(1.4)	14	(16)	1.3	(1.3)
5-45 Years ...	25	(22)	3.8	(3.0)	23	(31)	5.8	(6.2)	48	(53)	4.5	(4.3)
45-65 Years ...	228	(271)	34.7	(37.5)	78	(113)	19.6	(22.6)	306	(384)	29.0	(31.4)
Over 65 Years ...	349	(370)	53.1	(51.2)	268	(312)	67.3	(62.4)	617	(682)	58.5	(55.8)
All Ages ...	657	(722)	100.0	(100.0)	398	(500)	100.0	(100.0)	1,055	(1,222)	100.0	(100.0)

Over the age of 45 years, especially in the male population, bronchitis takes precedence over pneumonia as a cause of death.

The following table shows the deaths from pneumonia and bronchitis listed separately :—

DEATHS FROM PNEUMONIA AND BRONCHITIS, 1953.

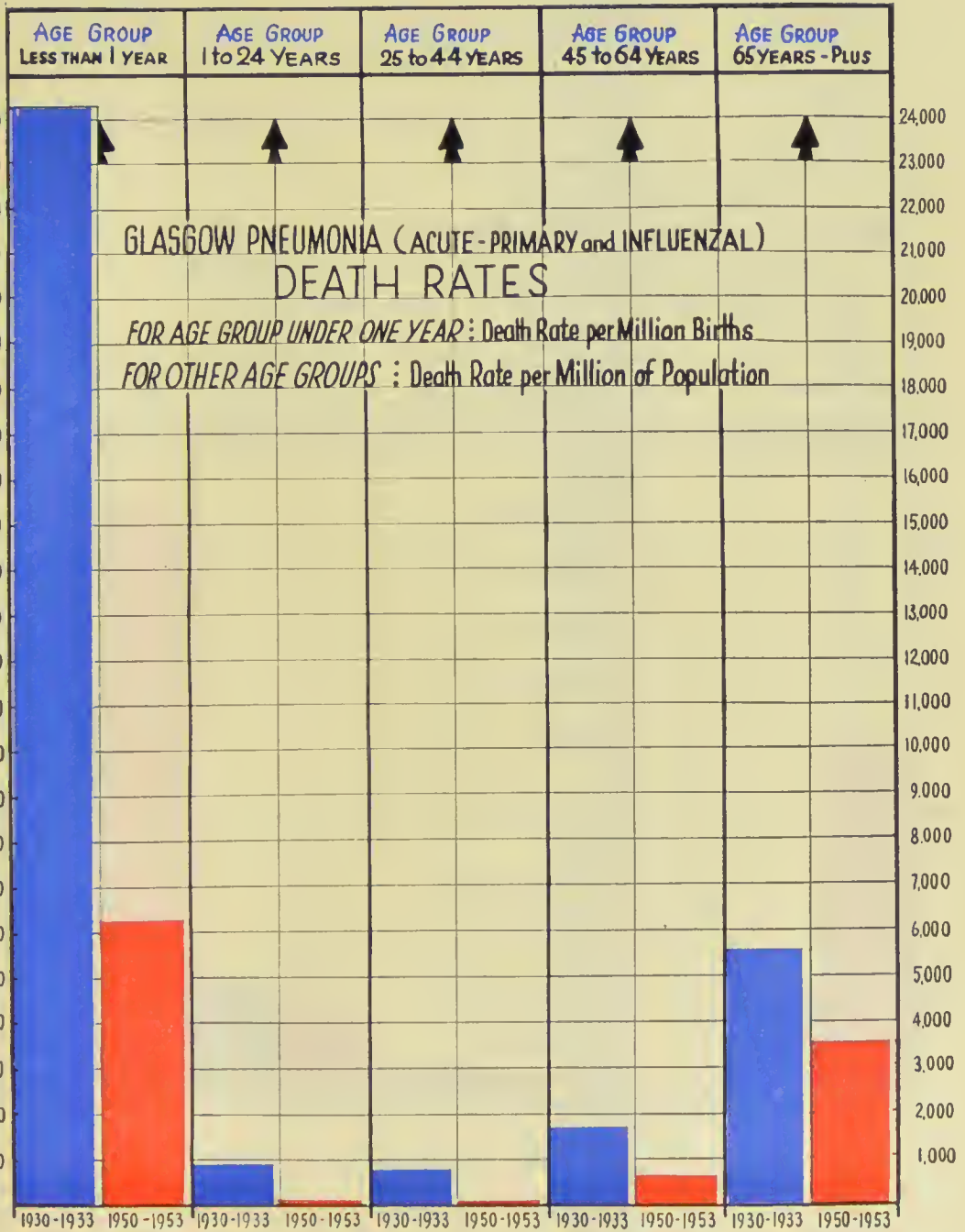
(Percentages of the column totals are given in parenthesis.)

	Pneumonia			Bronchitis		
	Male	Female	Both Sexes	Male	Female	Both Sexes
Under 1 Year ...	38 (16.1%)	21 (10.9%)	59 (13.8%)	7 (1.7%)	4 (1.9%)	11 (1.8%)
1-5 Years ...	8 (3.4%)	2 (1.0%)	10 (2.3%)	2 (0.5%)	2 (1.0%)	4 (0.6%)
5-45 Years ...	16 (6.8%)	18 (9.4%)	34 (7.9%)	9 (2.1%)	5 (2.4%)	14 (2.2%)
45-65 Years ...	57 (24.2%)	35 (18.2%)	92 (21.5%)	171 (40.6%)	43 (20.9%)	214 (34.1%)
Over 65 Years ...	117 (49.6%)	116 (60.4%)	233 (54.4%)	232 (55.1%)	152 (73.9%)	384 (61.2%)
All Ages ...	236 (100.0%)	192 (100.0%)	428 (100.0%)	421 (100.0%)	206 (100.0%)	627 (100.0%)

PROPORTIONATE MORTALITY PER CENT. OF DEATHS FROM ALL CAUSES,
OF DEATHS FROM PNEUMONIA, BRONCHITIS AND INFLUENZA,
ACCORDING TO AGE AND SEX.

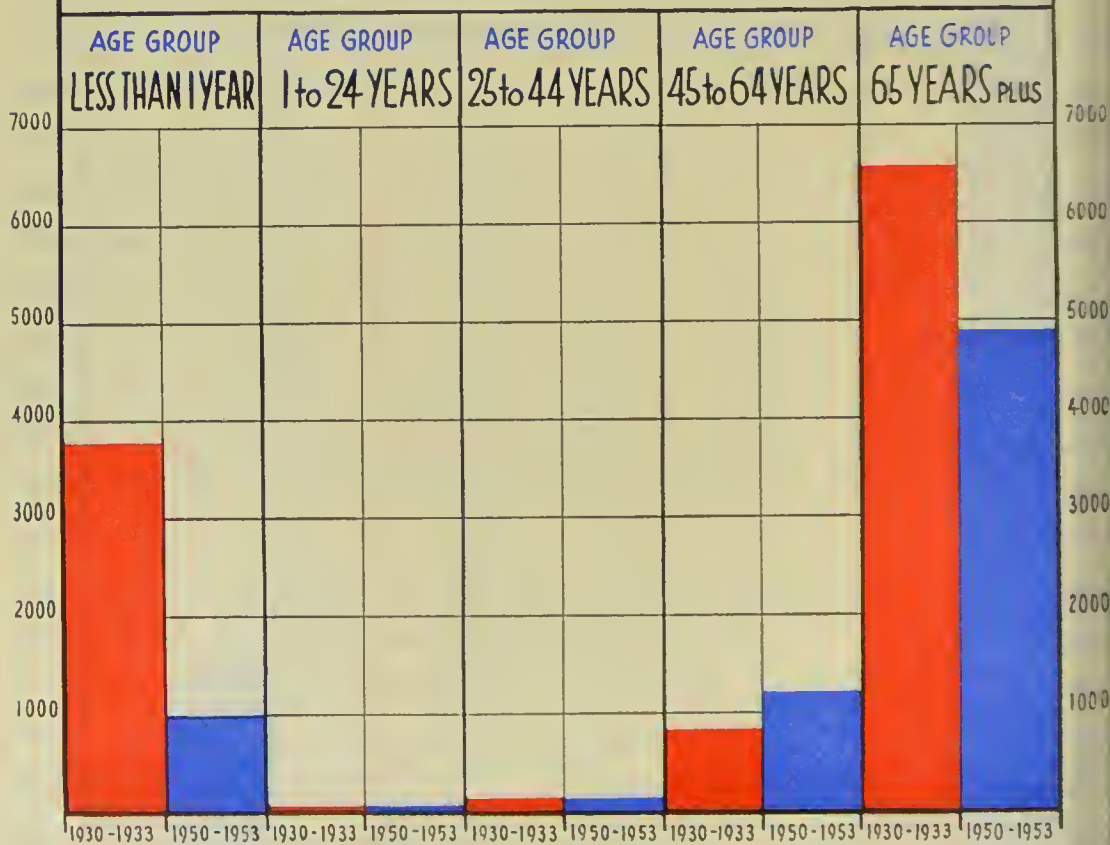
Age Groups	MALES			FEMALES			BOTH SEXES		
	Deaths from All Causes	Pneumonia, Bronchitis and Influenza	Proportionate Mortality per cent.	Deaths from All Causes	Pneumonia, Bronchitis and Influenza	Proportionate Mortality per cent.	Deaths from All Causes	Pneumonia, Bronchitis and Influenza	Proportionate Mortality per cent.
Under 5 Years ...	488	56	11.48	352	31	8.81	841*	87	10.34
5-45 Years ...	606	26	4.29	531	24	4.52	1,137	50	4.40
45-65 Years ...	2,170	239	11.01	1,379	87	6.31	3,549	326	9.19
Over 65 Years ...	3,584	362	10.10	3,716	304	8.18	7,300	666	9.12
All Ages ...	6,848	683	9.97	5,978	446	7.46	12,827*	1,129	8.80
All Ages, 1952	7,208	774	10.74	6,632	567	8.55	13,840	1,341	9.96

* Includes an infant of unknown sex.



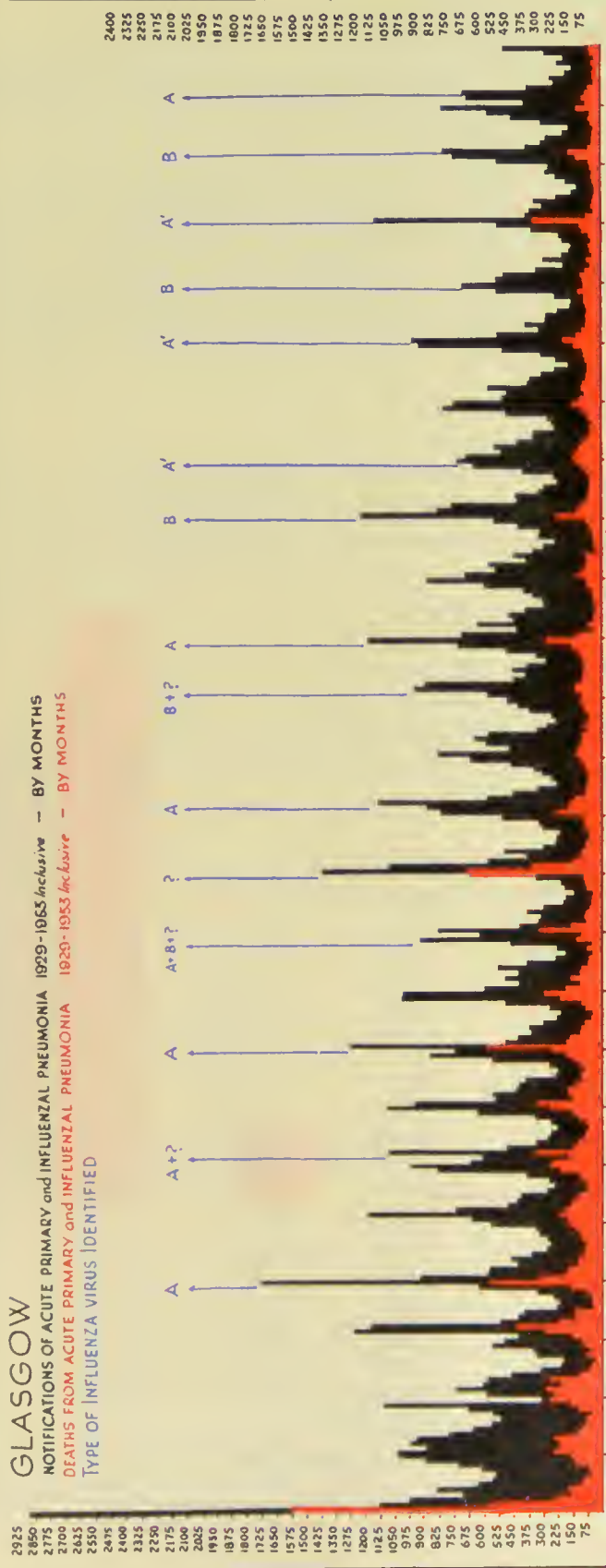
GLASGOW

DEATH RATES FROM BRONCHITIS and other RESPIRATORY CONDITIONS
 FOR AGE GROUP UNDER ONE YEAR · DEATH RATE per MILLION BIRTHS
 FOR OTHER AGE GROUPS · DEATH RATE per MILLION OF POPULATION



GLASGOW

NOTIFICATIONS OF ACUTE PRIMARY and INFLUENZAL PNEUMONIA 1929-1953 Inclusive -- BY MONTHS
 DEATHS FROM ACUTE PRIMARY and INFLUENZAL PNEUMONIA 1929-1953 Inclusive - BY MONTHS
 TYPE OF INFLUENZA VIRUS IDENTIFIED



DEATHS FROM BRONCHITIS and other RESPIRATORY CONDITIONS 1929-1953 Inclusive
 NOTE ALTERATIONS OF CLASSIFICATION OF DEATHS IN 1951



INFLUENZA.

There was no serious outbreak of influenza in Glasgow during 1953. The illness was present in the city, but its effect on the health of the community was relatively slight.

Observations on this disease have been facilitated recently by identification of the virus in the laboratory at Ruchill Hospital. Virus A influenza was noted as present in England early in January, 1953, but it was not until the end of the month that a similar finding occurred in Glasgow. The virus was isolated several times during February, but in spite of this the disease failed to spread, so that the city was spared an epidemic.

In dealing with influenza it is difficult to give figures which approach an accurate measure of incidence. Figures can be given which have an indirect bearing on the subject. Others can be quoted, such as the notifications of influenzal pneumonia and deaths from influenza, but these give only a rough index. Some of these figures are given in the following table if only to provide a basis for comparison in the future.

TABLE I.

- (a) New claims to the Ministry of National Insurance.
- (b) Notifications of Acute Primary and Influenzal Pneumonia.
- (c) Deaths Registered from Respiratory Diseases (excluding tuberculosis).

DECEMBER, 1952 TO MARCH, 1953.

		Week	(a)	(b)	(c)
1952	...	49	7,404	251	81
		50	5,484	218	63
		51	4,300	117	51
		52	3,554	103	38
1953	...	1	3,132	134	82
		2	6,321	171	52
		3	5,089	113	31
		4	4,605	103	36
		5	4,750	111	33
		6	5,297	147	28
		7	7,146	284	78
		8	8,758	254	63
		9	7,803	222	47
		10	6,189	197	51
		11	5,341	151	41
		12	5,014	177	28
		13	4,832	161	42

An influenza epidemic would noticeably affect all three sets of figures. Other factors also have their influence, for example a period

of cold foggy weather. It will be noted that at the beginning of December, 1952, there was a high figure in all three columns. This was unconnected with influenza in the city. There are also high figures in February when influenza was known to be present, viz., 8,758 new claims for sickness benefit, 284 notified cases of pneumonia and 78 deaths from respiratory diseases. These compare with maxima during a virus B influenza prevalence in March, 1952, of 9,772; 336; and 84 respectively. The peak in March, 1952, was not only higher than in February, 1953, but also broader, suggesting that the influence of the influenza lasted a longer time.

TABLE II : DEATHS FROM INFLUENZA.

	1952			1953		
	Male	Female	Total	Male	Female	Total
Under 5 years ...	3	2	5	1	2	3
5-45 years ...	5	4	9	1	1	2
45-65 years ...	24	18	42	11	9	20
65+ years ...	20	43	63	13	36	49
	<u>52</u>	<u>67</u>	<u>119</u>	<u>26</u>	<u>48</u>	<u>74</u>

As already stated, these figures cannot be taken as accurate, for whether a death is attributed to pneumonia or influenza often depends on the preference of the certifying doctor who is more likely to attribute it to influenza in an epidemic year. The figures show, however, a drop in mortality compared with 1952.

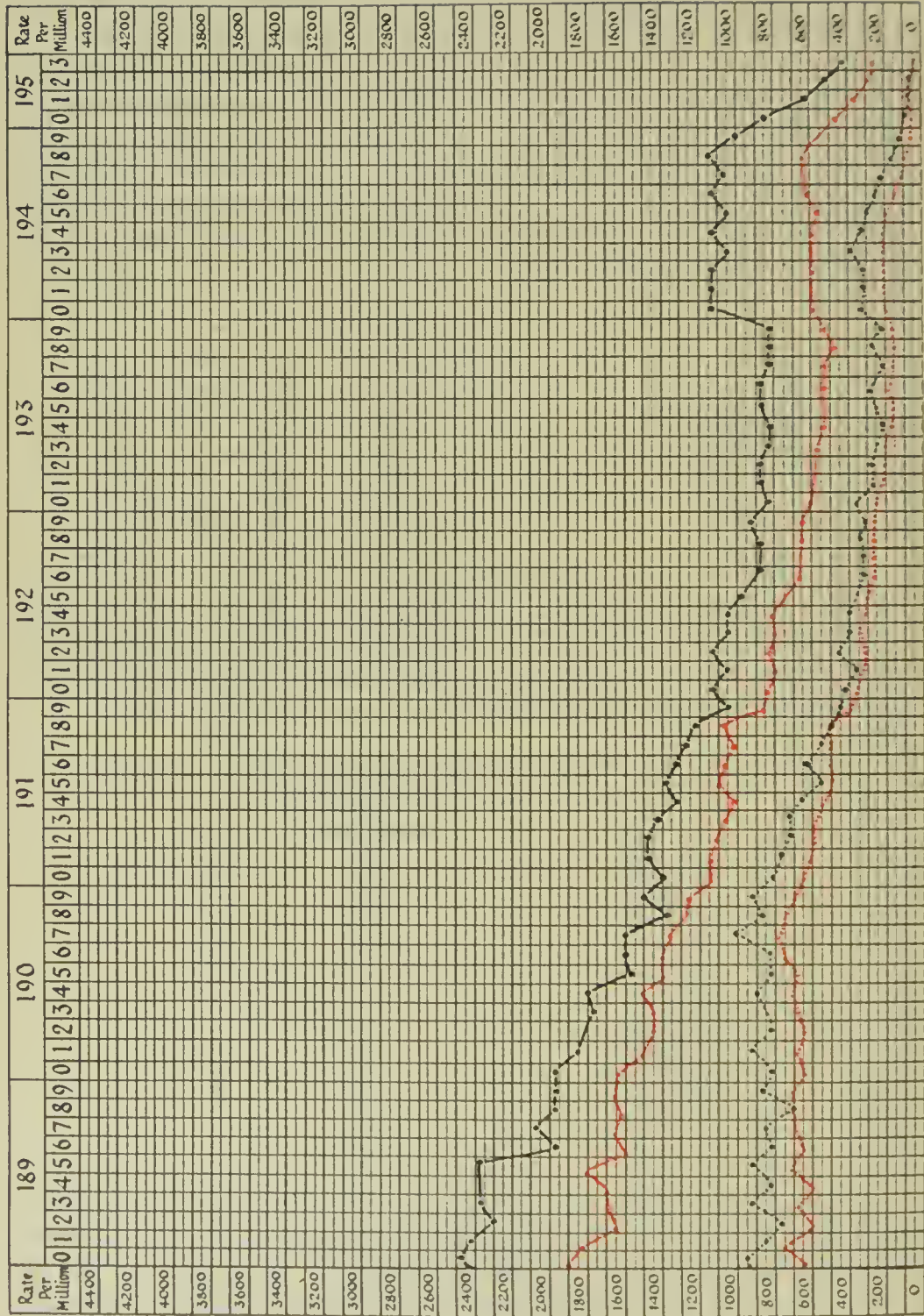
TABLE III : MONTHLY RETURNS OF INFLUENZAL PNEUMONIA NOTIFICATIONS AND DEATHS.

	Notifications		Deaths
January	12	10
February	58	26
March	74	22
April	29	6
May	4	2
June	7	—
July	2	—
August	3	—
September	3	—
October	5	—
November	5	4
December	19	2
		<u>221</u>	<u>72</u>

The deaths column corresponds closely to the total deaths from influenza in Table II. The reason for the discrepancy is due to some of the notifications being incorrect, while some deaths from influenza were never notified. In the present state of our knowledge these are the most accurate figures which can be produced for comparison in future years.

TUBERCULOSIS : CHART SHOWING DEATH RATES PER MILLION (Registrar General)

GLASGOW AND SCOTLAND, since 1890



TUBERCULOSIS.

A continued high incidence of tuberculosis was recorded in 1953, along with an increase in the number of pulmonary cases notified compared with 1952. The number of non-pulmonary notifications showed a small decrease. The trend of mortality from both forms of the disease continued downward. The rate of progress in B.C.G. vaccination was maintained and the total number of vaccinations performed again showed, for the third year in succession, roughly a three-fold increase. While this increase was largely due to the vaccination of school children begun in 1953, satisfactory progress was made also among other groups.

Incidence :—The total of 2,368 cases of pulmonary tuberculosis notified in 1953 was 104 more than in 1952, while the total of 295 non-pulmonary cases notified was 6 fewer. Recent trends in the incidence are shown in the following table :—

			Pulmonary	Non-Pulmonary	All Cases
Average, 1935-39	....		1,650	657	2,307
1940	....	....	1,908	669	2,577
1941	....	....	2,066	661	2,727
1942	....	....	2,324	714	3,038
1943	....	....	2,778	735	3,513
1944	....	....	2,758	671	3,429
Average, 1940-44	....		2,367	690	3,057
1945	....	....	2,641	555	3,196
1946	....	....	2,809	508	3,317
1947	....	....	2,765	512	3,277
1948	....	....	2,775	373	3,148
1949	....	....	2,829	390	3,219
Average, 1945-49	....		2,764	468	3,231
1950	....	....	2,446	369	2,815
1951	....	....	2,207	355	2,562
1952	....	....	2,264	301	2,565
1953	....	....	2,368	295	2,663

The total of 2,368 pulmonary cases is 43 per cent. above the pre-war average, compared with 37 per cent. above in 1952 and 34 per cent. above in 1951.

The cases notified show the following age and sex distribution :—

Age-Groups	Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females
— 5	60	46	27	13
—15	91	104	40	24
—25	349	475	36	62
—35	210	242	17	27
—45	154	128	6	9
—55	190	48	7	12
—65	157	27	5	1
+65	70	17	3	6
	<u>1,281</u>	<u>1,087</u>	<u>141</u>	<u>154</u>

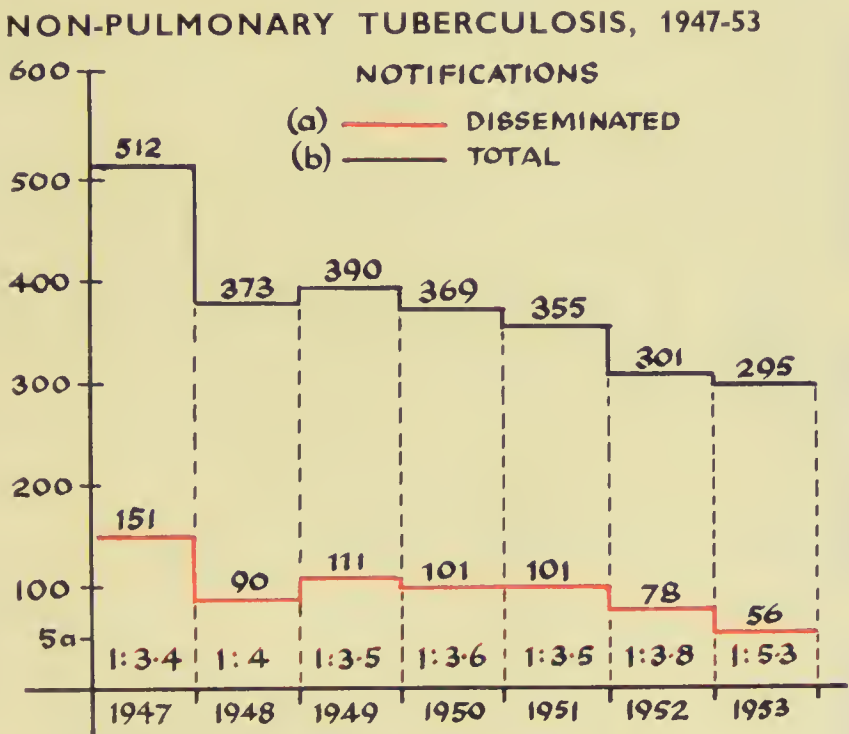
The relationship of each age-group and sex to the increase in pulmonary notifications is shown below :—

PULMONARY TUBERCULOSIS, 1953.

Age-Group	MALE			FEMALE		
	No. of Cases	Difference from 1952	Per cent. Difference from 1952	No. of Cases	Difference from 1952	Per cent. Difference from 1952
— 5	60	—8	—12	46	—4	—8
—15	91	+5	+6	104	—9	—8
—25	349	+62	+22	475	+12	+3
—35	210	—12	—5	242	—2	—1
—45	154	+1	+1	128	+15	+12
—55	190	—13	—6	48	—1	—2
—65	157	+38	+32	27	+5	+23
+65	70	+15	+27	17	—	—
	<u>1,281</u>	<u>+88</u>	<u>+7</u>	<u>1,087</u>	<u>+16</u>	<u>+1.5</u>

It is clear that the increase in notified cases can be very largely allotted to two age-periods in males, viz., young adults and those over 55 years. It must also be observed that the increase in notifications should be related to the intensified search for cases in contacts and other groups. This is demonstrated by the work of the X-ray Section described separately, where it is reported that the unit, in its first complete year of operation, detected over 200 cases of probably active lung disease.

Disseminated Tuberculosis :—The decline in the incidence of non-pulmonary disease includes two features of note. One is the diminished proportion of disseminated tuberculosis, mainly meningitis, among the non-pulmonary notifications. In 1953, this ratio fell to about one-fifth instead of one-fourth to one-third as in recent years. The following graph shows the total non-pulmonary notifications each year from 1947 to 1953 along with the proportion of cases of disseminated disease, mostly tuberculous meningitis.

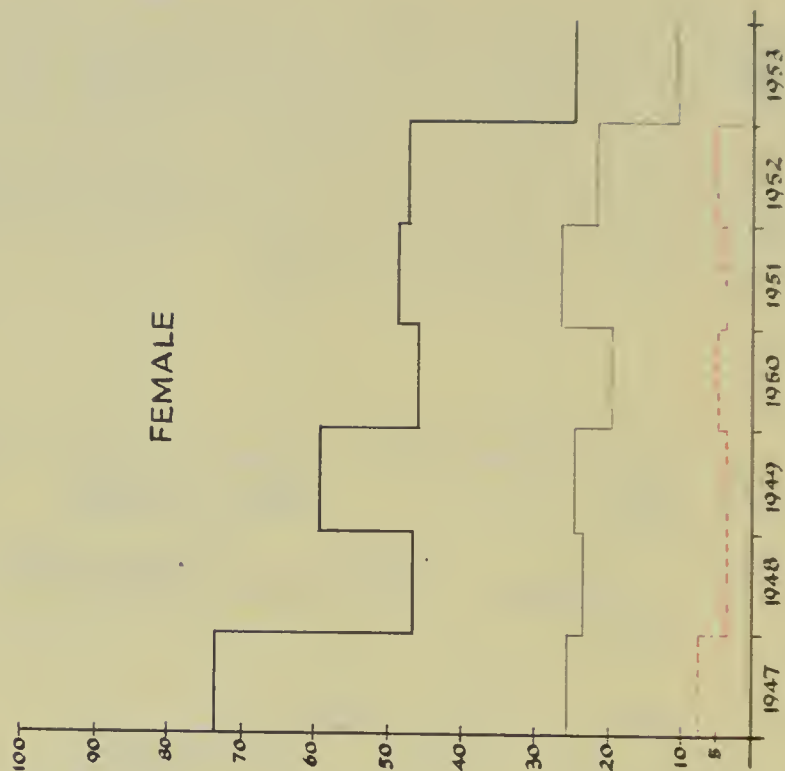
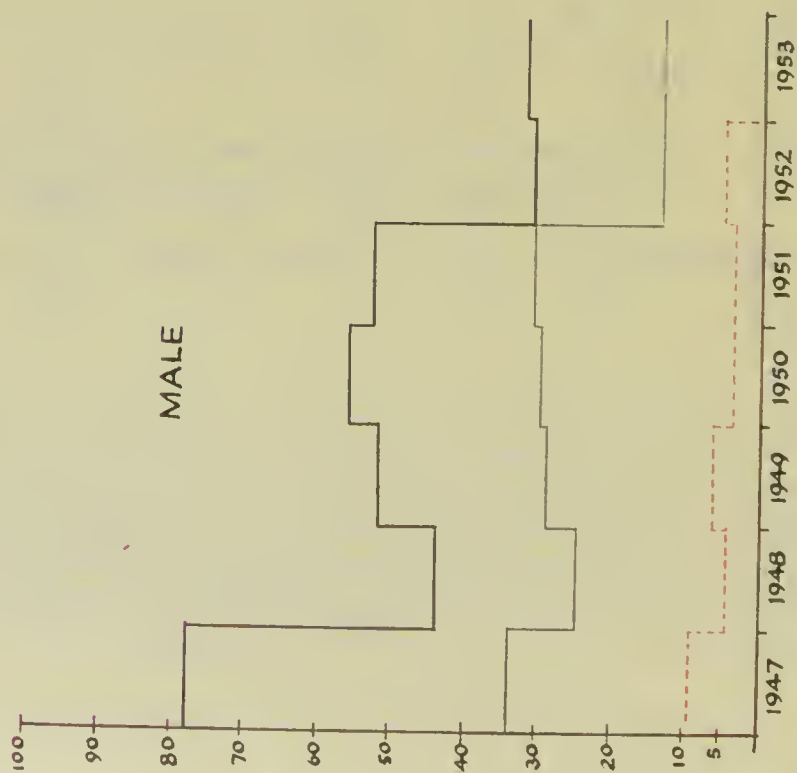


NOTE: Ratio of a:b is noted at foot of each column.

The other feature is that in 1953 for the first time on record there was no notified case of tuberculous meningitis among infants. In former years there were never fewer than six per annum. The following graphs show the trends of all notifications of disseminated tuberculosis in each sex from 1947 to 1953, with those for the infant age-group and children of 1-5 years indicated separately.

DISSEMINATED TUBERCULOSIS : NOTIFICATIONS, 1947-53

— TOTAL
— 5 YEARS
--- INFANTS



Mortality :—There were 471 deaths from pulmonary and 43 from non-pulmonary tuberculosis during 1953, a total of 514. The corresponding figures for 1952 were 571, 72 and 643. The trend in recent years is shown below :—

DEATH RATE PER MILLION.

Year	Pulmonary	Non-Pulmonary	All Forms
1946	1,086	222	1,308
1947	1,075	225	1,300
1948	1,161	137	1,298
1949	1,028	129	1,157
1950	874	118	992
1951	637	90	727
1952	525	66	591
1953	434	40	474

There has been another marked fall in the mortality from both forms of the disease. In the space of only three years since 1950, the pulmonary death rate has declined by one-half, and the non-pulmonary by two-thirds.

Institutional Treatment :—The numbers of patients who were admitted to and discharged from and who died in institutions in 1953 are shown in the following table :—

INSTITUTIONAL CASES.

	In Residence on Jan. 1	Admitted during 1953	Discharged during 1953	Died	In Residence on Dec. 31
Respiratory					
Adults—Male	505	992	864	85	548
Female	657	1,145	1,091	65	646
Children—Male	50	71	73	1	47
Female	76	102	111	—	67
Non-Respiratory					
Adults—Male	91	171	170	9	83
Female	93	160	159	7	57
Children—Male	89	87	78	2	96
Female	75	49	58	1	65
	<u>1,636</u>	<u>2,777</u>	<u>2,604</u>	<u>170</u>	<u>1,639</u>

These figures show no outstanding change from the pattern of recent years, although there has been a further gratifying fall in the deaths among patients admitted for treatment.

GLASGOW.—CASES OF TUBERCULOSIS NOTIFIED AND DEATH RATE PER
MILLION IN EACH MUNICIPAL WARD DURING 1953

Ward	Pulmonary			Non-Pulmonary		
	Cases		Death- rate Both Sexes	Cases		Death- rate Both Sexes
	Males	Females		Males	Females	
Shettleston and Tollcross	52	45	674	10	8	24
Parkhead	16	24	544	4	—	49
Dalmarnock	42	51	638	3	8	51
Calton	42	36	503	5	3	42
Mile-End	50	60	462	11	5	26
Dennistoun	17	22	460	3	2	38
Provan	45	43	416	2	3	76
Cowlairs	31	31	382	5	5	76
Springburn	56	40	312	4	2	57
Townhead	43	39	412	6	8	127
Exchange	25	26	616	4	3	136
Anderston	32	35	343	4	2	—
Park	31	12	420	4	3	47
Cowcaddens	30	35	471	3	3	39
Woodside	23	23	204	2	6	41
Ruchill	65	62	459	9	9	40
North Kelvin	26	15	241	5	1	120
Maryhill	35	29	543	8	2	42
Kelvinside	11	12	162	2	4	162
Partick (East)	21	15	466	2	4	—
Partick (West)	27	28	295	1	4	—
Whiteinch	18	16	223	—	4	—
Yoker	39	27	580	2	2	—
Knightswood	27	16	697	4	2	58
Hutchesontown	36	27	600	5	9	33
Gorbals	47	41	322	5	8	59
Kingston	30	24	313	3	4	—
Kinning Park	39	31	335	6	5	74
Govan	46	31	354	6	5	29
Fairfield	35	14	490	—	2	44
Craigton	41	33	459	2	5	—
Pollokshields	41	35	298	3	3	25
Camphill	16	9	232	—	2	46
Pollokshaws	42	57	580	3	7	42
Govanhill	16	12	323	—	3	40
Langside	19	14	160	4	2	—
Cathcart	20	7	44	—	3	—
Institutions	48	10	—	1	3	—
Harbour	1	—	—	—	—	—
Total for City	1,281	1,087	434	141	154	40

B.C.G. VACCINATION.

The two main features of B.C.G. vaccination in 1953 were the extension of the Scheme to include school children and the large annual total of vaccinations which has tripled itself for the third year in succession.

Extension of Scheme—Campaign in Schools.—As noted in the Annual Report, 1952, it had been decided to extend B.C.G. vaccination to school children in the 13-year-old age-group, and this project was undertaken in 1953. The population aged 13 was estimated to number over 16,000 and from the results of the preliminary tuberculin survey in 1952, it was known that some 60 per cent. of those tested would require vaccination.

Early in 1953, plans were made to begin the campaign in September, using teams of medical officer, health visitor and clerkess to visit the 109 schools concerned, and it was agreed to arrange the project as a short intensive campaign of about three months' duration.

First Phase.—The campaign began on 1st September and the first two weeks were regarded as a period of preliminary trial using a much modified time-table. During the third week the programme was accelerated and progress was maintained at maximum pace till 6th November, by which time the campaign had been completed except for six private schools.

Interval.—During the next two weeks the results were checked and summarised. It was found that in the 103 schools visited, over 10,000 children had been tested of whom 5,864 had been vaccinated. It was also found that the normal average loss of about 3 per cent. due to absence had been greatly exceeded during the potato harvest and that the aggregate loss was 1,245 children.

Second Phase.—This minor campaign began on 23rd November and closed on 16th December, its object being, as well as completing the private schools, to provide a further opportunity for vaccination to pupils previously absent. The children tested numbered almost 1,100 of whom 768 were vaccinated, and the scheme was then closed.

Summary.—The general results of the campaign may be summarised as follows :—

Out of a population of 16,380 children aged 13 years, parental consent to B.C.G. vaccination was granted in 11,597 instances (70·8 per cent.).

Of these 11,597 children, 391 (3·4 per cent.) could not be tested or vaccinated because of absence from school at the given time.

Of the remaining 11,206 children, 6,648 (59·3 per cent) proved to be Mantoux-negative.

Of the 6,648 negative reactors, 6,632 (99·8 per cent.) received B.C.G. vaccine.

Comments.—Despite the fact that this scheme was planned on rather theoretical lines because of absence of known precedent on a similar scale, the campaign met with considerable success.

The aggregate personnel employed was six medical officers, including a senior medical officer in charge and two others seconded from the school health service, ten tuberculosis health visitors and six clerkesses, all members of the staff of the Medical Officer of Health. The entire scheme thus proved to be well within the capacity of the department.

The public response of 71 per cent. was considered to be encouraging. Out of over 6,600 vaccinations, sequelae were negligible, and there was no reported instance of gland abscess.

The success achieved would not have been possible without the admirable co-operation of the Education Department, headmasters and school staffs.

STATISTICAL SUMMARY.

1. *Public Response—Parental Consent to Vaccination.*

		Schools	Pupils	Consents	Response
Public Schools	....	103	16,125	11,398	70·7%
Private Schools	....	6	255	199	78·0%
All Schools	....	<u>109</u>	<u>16,380</u>	<u>11,597</u>	<u>70·8%</u>

2. *Loss due to Absence from School.*

	(1)	No. Absent 1st Visit	% of (1)	No. Tested	No. Absent 2nd Visit	% of (1)	Total No. Absent	% of (1)	No. of Tests Read
Public Schools	11,398	235	2·1	11,163	151	1·3	386	3·4	11,012
Private Schools	199	4	2·0	195	1	0·5	5	2·5	194
All Schools	<u>11,597</u>	<u>239</u>	<u>2·1</u>	<u>11,358</u>	<u>152</u>	<u>1·3</u>	<u>391</u>	<u>3·4</u>	<u>11,206</u>

Note.—The loss at the end of the main campaign was 1,245, which was reduced to the final total of 391.

3. *Results of Mantoux Tests.*

		No. of Tests	Positive	%	Negative	%
MALE—						
Public Schools	....	5,122	2,144	41.9	2,978	58.1
Private Schools	....	63	23	36.5	40	63.5
Total	....	<u>5,185</u>	<u>2,167</u>	<u>41.75</u>	<u>3,018</u>	<u>58.25</u>
FEMALE—						
Public Schools	....	5,890	2,351	39.9	3,539	60.1
Private Schools	....	131	40	30.5	91	69.5
Total	....	<u>6,021</u>	<u>2,391</u>	<u>39.7</u>	<u>3,630</u>	<u>60.3</u>
All Results		<u>11,206</u>	<u>4,558</u>	<u>40.7</u>	<u>6,648</u>	<u>59.3</u>

4. *B.C.G. Vaccinations.*

		Negative Reactors	Not Vaccinated	%	Vaccinated
MALE—					
Public Schools ....	....	2,978	9	0.3	2,969
Private Schools	....	40	—	—	40
Total ....	....	<u>3,018</u>	<u>9</u>	<u>0.3</u>	<u>3,009</u>
FEMALE—					
Public Schools ....	....	3,539	6	0.2	3,533
Private Schools	....	91	1	1.1	90
Total ....	....	<u>3,630</u>	<u>7</u>	<u>0.2</u>	<u>3,623</u>
TOTALS	....	<u>6,648</u>	<u>16</u>	<u>0.2</u>	<u>6,632</u>

Routine Vaccination Scheme.—While the large increase in vaccinations for 1953 mostly resulted from the campaign in schools, progress was well maintained in the routine scheme of B.C.G. vaccination.

The total vaccinations performed in all groups in 1953 was 11,619 compared with 4,056 in 1952 and their distribution is shown below.

B.C.G. VACCINATIONS, 1953.

Group				Centre	Vaccinations	
Contacts	....	....	....	Moffat Street	....	141
Contacts	....	....	....	Carnbooth	....	71
Contacts	....	....	....	Millbrae	....	74
Infant Contacts	....	....	....	Millbrae	....	120
Contacts	....	....	....	Clinics	....	1,243
Contacts	....	....	....	Baird Street	....	88
Contacts	....	....	....	R.H.S.C.	....	91
Nurses	....	....	....	Hospitals	....	174
Medical Students	....	....	....	University	....	74
Total (Primary Groups)						2,076
Infants	....	....	....	Maternity Hospital	....	1,898
Infants	....	....	....	Robroyston Hospital	....	834
School Children	....	....	....	Schools	....	6,632
Others	....	....	....	Various	....	179
Total (Secondary Groups)						9,543
Total (All Groups)						11,619

These figures are extremely gratifying, and it is very satisfactory to note, apart from the results of the school campaign, other two features, viz., the continued rise in the number of contacts vaccinated each year, and the marked increase in infant vaccinations during the second year of operation of this part of the scheme.

Note.—At the time of writing, it has been announced that, as a result of the B.C.G. campaign in schools, the National Baby Welfare Council have awarded the William Hardy Shield to Glasgow for the most meritorious performance in children's welfare during 1953. The distinction is conferred annually, and this is the first time the award has been made in Scotland.

X-RAY SECTION.

This section opened in 1952, and therefore 1953 was its first full year of operation. During the year, the unit continued to function smoothly on the whole and no major difficulties occurred. In June, a new appointment was made to replace the existing Radiographer who left to be married.

During 1953, the number of radiograms taken was 10,500. Of these, 9,909 were miniatures and 591 full-size films, of which 560 were recalls. The recall rate was 5·6 per cent. The distribution of the miniature films among the main groups of persons dealt with is shown below.

MINIATURE RADIOGRAMS, 1953.

	Male	Female	Total
1. Contacts	2,453	2,875	5,328
2. Superannuation and Sick Pay	1,472	656	2,128
3. Industrial	181	423	604
4. Other Local Authorities ...	33	1	34
5. Miscellaneous	740	1,075	1,815
	<hr/> 4,879	<hr/> 5,030	<hr/> 9,909
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

The miscellaneous group includes a number of smaller sub-groups who may attend routinely or on specific occasions, such as staffs of children's homes, district nurses, student health visitors, nursery nurse trainees, domestic helps, school children, departmental staffs, staffs of private firms, prospective foster-parents and other individuals by arrangement.

The presence of various conditions was detected and confirmed by full-size films, the most important being 207 cases of pulmonary disease, 118 in males and 89 in females, diagnosed as active or significant pulmonary tuberculosis. An additional 147 cases, 93 male and 54 female, were provisionally diagnosed as inactive tuberculosis. The distribution of the main conditions found among the various groups is shown in the following table.

FULL-SIZE FILMS, 1953.

Groups	T.B. Active	T.B. In- active	Pleurisy	Root Con- ditions	Others	N.A.D.	Total
MALE--							
(1) Contacts	67	51	7	6	10	36	167
(2) Superannuation and Sick Pay	26	25	3	1	11	9	75
(3) Industrial	10	8	2	—	4	2	26
(4) Other L.A.'s	—	1	—	—	—	1	2
(5) Miscellaneous	15	18	6	1	13	11	64
Totals	<u>118</u>	<u>93</u>	<u>18</u>	<u>8</u>	<u>38</u>	<u>59</u>	<u>334</u>
FEMALE—							
(1) Contacts	61	19	4	9	16	27	136
(2) Superannuation and Sick Pay	9	14	4	3	8	10	48
(3) Industrial	4	6	2	—	—	4	16
(4) Other L.A.'s	—	—	—	—	—	—	—
(5) Miscellaneous	15	15	2	—	3	22	57
Totals	<u>89</u>	<u>54</u>	<u>12</u>	<u>12</u>	<u>27</u>	<u>63</u>	<u>257</u>
BOTH SEXES—							
Totals	<u>207</u>	<u>147</u>	<u>30</u>	<u>20</u>	<u>65</u>	<u>122</u>	<u>591</u>

The conditions grouped under " Others " were basal adhesions, slight degrees of fibrosis, cardiac abnormalities and bone aberrations of ribs or spine.

Several observations must be made on this summary of the work of the X-ray Section. It is clear that the unit is relieving other X-ray centres of a considerable annual load, and the indications are that this load will increase each year. It is also clear that the unit is proving to be a valuable additional weapon in preventive work, as the detection of over 200 cases of significant pulmonary tuberculosis demonstrates. Moreover, these cases constitute, in relation to the total registered in 1953, an appreciable number which might not otherwise have been added, and the continued high incidence of pulmonary tuberculosis noted elsewhere should be viewed in the light of this intensified search for cases.

VENEREAL DISEASES.

During the year there was a further reduction in the incidence of acute syphilis, both in males and females, which has been continued into 1954. On the other hand, the number of cases of acute gonorrhoea has again increased, both in males and females, but is still below the peak years of 1946 and 1947.

With the reduction in the incidence of venereal disease it has been decided to reduce the clinic and institutional facilities available. The least suitable *ad hoc* centre, Bellahouston, is to be closed during the coming year and with the reduction in the need for institutional treatment, the large ward in Belvidere is being converted into a tuberculosis clinic for the eastern part of the City. Any patients under treatment will be transferred to the smaller ward used in pre-war years for male cases.

The reduced incidence of cases has permitted the clinicians to study more completely some of the interesting conditions which come to the clinics. One condition which is receiving world-wide attention is called non-specific urethritis, probably a real venereal disease, but no proof has been obtained as to the causative organism. Perhaps it is due to a virus of the pleuro-pneumonia type but the evidence is as yet unconvincing. The treatment of all types of the condition has proved discouraging. All antibiotics have been tried but have been found relatively ineffective and where some impression has been made there is a tendency for relapse. The use of streptomycin with sulphathiazole appears helpful and in certain special cases chloromycetin gives some improvement. There are associated with the condition complications of various types, including arthritis, similar in type to gonococcal arthritis but not affected by antibiotics. As compared with the principal venereal diseases, the condition has up till now had only a limited incidence. Special efforts, however, are being made to obtain a suitable method of treatment and to find the cause.

The comparative figures for the incidence of acute venereal disease during the pre-war, war and post-war periods are shown in the following table :—

NEW CASES OF VENEREAL DISEASE.

Year.	Acute Syphilis.		Acute Gonorrhoea.	
	Males.	Females.	Males.	Females.
1938	250	124	1,426	157
1939	293	118	1,358	143
1942	778	395	1,536	308
1943	671	368	1,323	407
1946	687	356	2,463	449
1947	597	247	2,164	305
1951	105	32	1,280	169
1952	61	21	1,352	164
1953	21	6	1,527	169

The incidence of acute syphilis in males is now one-fifth of the 1951 figures and 91·6 per cent. below the 1938 incidence. In the case of females the figure for 1953 is also one-fifth of the figure for 1951 and 95·2 per cent. below that ruling in 1938.

Acute gonorrhoea in males has increased and is now above the 1952 figure, as is also the number of cases of acute gonorrhoea in females.

There has also been an increase in the number of new cases attending the centres for the first time, although the number of " transferred-in " cases has decreased.

NEW AND TRANSFERRED-IN CASES OF VENEREAL DISEASE ATTENDING THE CENTRES FOR THE FIRST TIME.

Year.					Total New Cases.	Transferred-in.
1938	...	...	...	...	5,189	245
1939	...	...	...	...	4,724	189
1942	...	...	...	...	6,344	642
1943	...	...	...	...	7,740	853
1946	...	...	...	...	9,937	1,495
1947	...	...	...	...	8,181	570
1951	...	...	...	...	4,947	445
1952	...	...	...	...	5,301	450
1953	...	...	...	...	5,431	270

The attendance of patients suffering from non-venereal conditions is still high—in males the figure for 1953 being two-and-a-quarter times the figure for 1938 but slightly down on 1952. The attendance of females is almost two-and-three-quarters times the 1938 figure but there has been a slight decrease as compared with 1952.

ATTENDANCE OF PATIENTS SUFFERING FROM NON-VENEREAL CONDITIONS.

Year.			Males.	Females.	Total.
1938	...	...	824	153	977
1939	...	...	747	142	889
1942	...	...	1,058	398	1,456
1943	...	...	2,002	708	2,710
1946	...	...	3,027	650	3,677
1947	...	...	2,458	547	3,005
1951	...	...	1,707	360	2,067
1952	...	...	1,924	391	2,315
1953	...	...	1,839	424	2,263

The contact tracing, as well as defaulter follow-up work, is carried out by the staff of the male *ad hoc* centres in respect of males and by the health visitors attached to the female centres in the case of females. The following table shows the follow-up by the male and female clinics :—

CONTACT TRACING AND FOLLOW-UP OF SOURCES OF INFECTION.

Referred by Male Clinics.

	Wives.		Consorts.	
	Number.	Percentage.	Number.	Percentage.
Attended ...	97	86.6	21	47.7
Did not attend	15	13.4	23	52.3
	<hr/> 112		<hr/> 44	

Total Referred, 156 ; Total attended, 118=75.6 per cent.

Referred by Female Clinics.

						Husbands and	Consorts.
						Number	Percentage
Attended ...	...	...	...	...	...	14	53.8
Did not attend	...	...	...	...	...	12	46.2
Total Referred	...	...	...	...	...	<hr/>26	

The numbers cannot be regarded as satisfactory.

Syphilis.—The number of male patients suffering from acute syphilis coming to the clinics for the first time in 1953 was 21, which compares with 61 in 1952, 105 in 1951 and 201 in 1950. Acute syphilis in females decreased from 32 in 1951 to 6 in 1953.

The number of patients suffering from late syphilis was 147, which compares with 212 in 1952 and 1951 and 293 in 1950. The figure for 1953 is a 68.5 per cent. reduction on that ruling in 1938. The following table shows the changes in incidence that have occurred since 1938 :—

LATE SYPHILIS.

Year.	Males.	Females.	Total.
1938 ...	217	250	467
1939 ...	174	191	365
1942 ...	145	157	302
1943 ...	206	191	397
1946 ...	154	161	315
1947 ...	155	167	322
1951 ...	114	98	212
1952 ...	127	85	212
1953 ...	100	47	147

The very marked reduction in early syphilis has continued steadily since the introduction of massive doses of penicillin. The clinics now may operate for months without seeing a single chancre and when cases do occur, steps are taken to secure specimens of the treponema for teaching purposes.

For the first time there have been no cases of congenital syphilis under one year and the number of cases at all ages was 8, only one-quarter of the 1952 figure.

CONGENITAL SYPHILIS.

Year.		All Cases.	Cases —1 Year.	Rate per 1,000 Live Births.
1922	...	1,023	335	12.8
1927	...	551	119	5.0
1932	...	240	72	3.2
1937	...	177	36	1.6
1942	...	71	27	1.3
1943	...	97	32	1.4
1946	...	72	27	1.1
1947	...	80	25	0.97
1951	...	24	5	0.25
1952	...	33	5	0.25
1953	...	8	—	—

During the year 8,457 ante-natal blood tests were carried out and 0.35 per cent. were found positive. The number of blood tests represents less than half the total births in the City and a special effort has been made to persuade practitioners to adopt the practice of ante-natal blood tests for the Rhesus Factor and the Kahn and Wassermann Tests.

PRE-NATAL BLOOD TESTS.

Year.			Number.	Percentage Positive.
1925	...	...	—	4.9
1930	...	...	1,749	2.8
1935	...	...	3,334	1.8
1940	...	...	8,714	1.3
1942	...	...	10,265	1.18
1943	...	...	11,067	1.7
1946	...	...	13,946	1.23
1947	...	...	13,250	1.46
1951	...	...	9,796	0.65
1952	...	...	8,661	0.87
1953	...	...	8,457	0.35

Gonorrhoea.—The incidence in acute gonorrhoea in males has risen from 1,352 in 1952 to 1,527 in 1953 and there has also been a slight increase in the incidence in females from 164 in 1952 to 169.

Chronic gonorrhoea in both males and females has continued to decrease and now is only a minute proportion of the incidence in 1938.

CHRONIC GONORRHOEA.

Year.		Males.	Females.	Total
1938	...	101	312	413
1939	...	53	266	319
1942	...	67	88	155
1943	...	73	93	166
1946	...	35	48	83
1947	...	32	38	70
1951	...	11	10	21
1952	...	9	6	15
1953	...	6	6	12

Venereal Diseases in Seamen.—The *ad hoc* clinics continue to serve seamen coming to the port. The actual numbers suffering from early syphilis continue to fall but the numbers suffering from acute gonorrhoea have risen, in line with the rise in gonorrhoea generally.

BLACK STREET, BROOMIELAW AND BELLAHOUSTON CLINICS.

NEW AND TRANSFERRED-IN PATIENTS.

PROPORTION OF SEAMEN TO TOTAL CASES.

Early Syphilis.					Acute Gonorrhoea.		
Year.		All.	Seamen.	Per-centage.	All.	Seamen.	Per-centage.
1939	...	265	54	20.4	1,133	75	6.6
1940	...	403	133	33.0	1,210	224	18.5
1941	...	793	434	54.7	1,671	539	32.3
1942	...	1,082	589	54.4	1,543	532	34.5
1943	...	1,149	577	50.2	1,393	436	31.3
1946	...	1,264	164	13.0	3,070	435	14.2
1947	...	872	166	19.0	2,340	330	14.1
1951	...	162	40	24.7	1,347	204	15.1
1952	...	94	34	36.2	1,417	198	14.0
1953	...	35	14	40.0	1,597	208	13.0

In-Patients.—The in-patient treatment has been reduced by the conversion of one of the large wards in Belvidere Hospital to the purposes of a tuberculosis clinic but there is still available sufficient accommodation to meet the need. The number of patients for whom hospital treatment is necessary has continued to decrease and during

the year only 102 patients were treated in hospital as compared with 136 in 1952 and 200 in 1951. These figures compare with the peak number, 694, treated indoor in 1943. During 1953, 54 patients were treated in Belvidere Hospital and 48 in Baird Street and Ruchill Hospitals. The following table shows the admission of patients to institutions :—

TOTAL NUMBER OF PATIENTS ADMITTED FOR IN-PATIENT TREATMENT.

	Sex.	Primary Syphilis D.G. + W.R. —	Primary Syphilis W.R. +	Secondary Syphilis.	Latent Syphilis.	(1st year), All Later Stages.	Congenital Syphilis.	Extra-genital Infection.	Acute Gonorrhoea.	Chronic Gonorrhoea.	Soft Chancre.	Non-Specific Venereal Disease.	Non-Venereal	Total Admissions.	Aggregate Days' Residence.	Average Days' Residence
Belvidere Hospital	M.	1	1	1	—	19	—	—	2	—	2	24	4	54	2,151	39.8
Baird Street	M.	—	—	—	—	—	—	—	—	—	—	—	1	1	691	138.2
	F.	—	—	—	—	2	—	—	2	1	—	—	3	8	272	34.0
Ruchill Hospital	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	365	365.0
	F.	—	3	—	—	18	3	—	5	1	—	4	5	39	2,224	57.0
Other Hospitals	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals		1	4	1	—	39	3	—	9	2	2	28	13	102	5,703	55.0

Attendance of Patients.—Patients attending for the first time at the various centres numbered 5,431, a slight increase over the figure for 1952, 5,301. There were 44,702 attendances of new and old patients and 102 patients were admitted for in-patient treatment, 30 being admitted directly without previous attendance at a clinic. The *ad hoc* clinics dealt with 89 per cent. of all acute venereal disease coming to the diagnostic and treatment centres. The following table summarises the attendance of new patients at the various centres :—

	<i>Ad hoc</i> Treatment Centres.		Glasgow All Centres.
	Males.	Females.	
Acute Syphilis (includes Primary, Secondary and Latent in the First Year of Infection)	17	6	27
Acute Gonorrhoea	1,527	164	1,696
Total Acute Venereal Disease ...	1,544	170	1,723
Late and Congenital Syphilis	72	23	155
Chronic Gonorrhoea	6	6	12
Total Chronic Venereal Disease ...	78	29	167
Other Diseases, including Soft Sore, Septic Balanitis, etc.	1,149	62	1,278
Non-Venereal	1,804	366	2,263

Incidence of Jaundice.—During the year, out of 17 cases of early syphilis attending the *ad hoc* centres, none developed jaundice. With the reduced use of arsenic and improved technique, jaundice no longer appears as an important complication of the treatment of syphilis.

Follow-up of Defaulters.—With the rapid treatment of both acute syphilis and acute gonorrhoea, a fairly high proportion of the patients default before completing treatment. Efforts have been made to obtain the attendance of defaulters by follow-up letters and by personal visits of the health visitors in the case of females and the senior attendants in the case of males. During the year the health visitors attended 909 female patients on 1,187 occasions and persuaded 75·2 per cent. of the patients to resume treatment. The wrong name and address had been given by 92 patients. In the follow up of male patients, 1,885 follow-up letters were sent to 1,292 patients who defaulted during treatment and only 43·4 per cent. resumed treatment. On 395 occasions the wrong name and address was given. The low percentage of males resuming treatment is unsatisfactory but it is probable that most patients have received sufficient treatment to reduce the danger of spread of infection.

SECTION V.

MENTAL SERVICES.

The duties of the four full-time medical officers attached to this section remained unaltered during the year. The following paragraphs detail the work carried out.

MENTAL DEFECTIVES BOARDED-OUT.

The total number of mental defectives on the roll at 31st December, 1953, was 1,322 as compared with 1,300 the previous year, an increase of 22. The number resident within the city was 1,019 compared with 1,021 in 1952. The following are the statistics in respect of these cases :—

	City	Country	Total
On roll at 31st December, 1952 ...	1,021	279	1,300
Enrolled and transferred during year ...	66	34	100
Taken off roll by death, recovery or transfer	68	10	78
Remaining on roll at 31st December, 1953	<u>1,019</u>	<u>303</u>	<u>1,322</u>

During the year 19 patients were, at their own request, transferred from their homes in Glasgow to farms outwith the city, and only one, an epileptic, has since returned to the care of his parents.

Sixty-one patients were admitted to institutions. Eleven of these were detained at the instance of the Education Department until they attained the age of sixteen when it was considered that they should be continued in the institution for further training.

The number of patients unfit and unsuitable for education who are under the care of their parents and who are awaiting admission to institutions is still high, particularly in respect of children below the age of sixteen years. Many are confined to bed in homes without modern conveniences and are a great burden on their relatives. There has been no improvement in the provision of accommodation for these children, and the problem has been repeatedly brought to the notice of the Regional Hospital Board which, by the terms of the National Health Service (Scotland) Act, 1947, became responsible for the provision of institutional accommodation for certified mental defectives.

At the request of the General Board of Control, special reports were made on the suitability for continued guardianship, removal to an institution, or discharge, in respect of 507 patients—an increase of 53 from the previous year.

Under Section 24 of the Criminal Justice (Scotland) Act, 1949, 23 convicted persons were certified as mentally defective and, by order of the Court, placed under guardianship in private homes, following arrangements made by this Department. In addition, 16 patients were ordered to be detained in institutions under the control of the Western Regional Hospital Board and one in the State Institution.

Petitions for Judicial Orders for the placing of 12 defectives where relatives were not willing to make the necessary applications for their care were presented to and granted by the Sheriff. The corresponding figure for 1952 was 20.

Six patients gave birth to illegitimate children during the year, all these girls being under the care and supervision of their parents. One was on licence from a certified institution and one has been recertified and admitted to Lennox Castle. One of the children died a few weeks after birth, three are in Children's Homes and two are being cared for by their maternal grandparents.

MENTAL PATIENTS BOARDED-OUT.

These are certified patients who have been resident in mental hospitals and, having made a partial recovery, are considered by the medical superintendent to be suitable for boarding-out under the care of a guardian, either related or unrelated; or destitute patients, suffering from a mental illness which does not require treatment in a mental hospital but who have been certified and placed under the care of a guardian. They are visited quarterly by a medical officer, as are mental defectives. Within the city, these visits are carried out by the Department's own staff, while outwith the city they are done by medical practitioners appointed by the Department.

Boarded-out mental patients on the Roll at 31st December, 1953, numbered 111—a decrease of 13 from the previous year. Eighty-three of these patients are resident outwith the city boundary.

In addition to these cases on the Roll the Department visits and supervises all cases liberated on probation from mental hospitals, and as these patients are not entitled to National Assistance it is usually necessary to grant an allowance, which is recovered from the Regional Hospital Board in whose area the mental hospital from which they were liberated is situated.

EXAMINATION OF MENTAL PATIENTS FOR CERTIFICATION, ETC.

The full-time medical staff of the Mental Services Section of the Department is available within the city area for the examination and, where necessary, the certification of patients referred by general

practitioners as being persons of unsound mind. Arrangements for admission and removal of patients are dealt with by officers of the Regional Hospital Board. The Mental Services' Medical Officers provide a 24-hour service, and approximately 25 per cent. of the total cases were seen outwith normal hours, that is visits were needed at night or at the weekend.

The number of cases seen during the year classified according to the final decision made is shown in the table below :—

			Prisons		City		Totals		Grand
			M.	F.	M.	F.	M.	F.	Total
Fully Certified	...	...	62	31	130	242	192	273	465
Not Certified	...	...	1	7	107	105	108	112	220
Mental Observation	...	—	—	5	11	12	11	17	28
For M./D. Institution	...	—	—	—	8	5	8	5	13
Cancelled	...	...	—	—	1	3	1	3	4
			<u>63</u>	<u>43</u>	<u>257</u>	<u>367</u>	<u>320</u>	<u>410</u>	<u>730</u>

Of the above cases, 61 per cent. required full certification, as compared with 66 per cent. in 1952, while 3·8 per cent. were found suitable for mental observation wards as against 4·3 per cent. in 1952.

The cases certified in the prisons amounted to 20 per cent. of the total certified, the corresponding figure for 1952 being 19·34 per cent.

In addition, 95 cases were examined in the city's general and special hospitals as compared with 74 for the previous year.

During 1953 a total of 29 persons were recommended to the mental hospitals as voluntary patients. The corresponding figures for 1952 and 1951 were 22 and 14 respectively. For all purposes, the medical officers made 6,186 visits in the course of the year.

RESULTS OF MENTAL EXAMINATION OF OLD PEOPLE.

(Persons aged 65 years and upwards).

		1952		1953	
		Cases	Percentage	Cases	Percentage
1. Total Mental Cases (less Prisons, M./D. cases and cancelled) ...	...	529	—	607	—
2. Senile Cases Seen ...	...	235	44·4 (of 1)	281	46·3 (of 1)
3. Senile Cases Certified ...	...	143	60·8 (of 2)	179	63·7 (of 2)
4. Senile Cases Not Certified ...	...	92	39·1 (of 2)	102	36·3 (of 2)

While it is interesting to note that the percentage of senile cases "certified" and "not certified" has remained virtually the same for both years, the proportion of senile cases to total cases continues its steady rise, being 46·3 per cent. of the total as against 44·4 per cent. for 1952 and 41·3 per cent. for 1951.

SECTION VI.

BLIND PERSONS.

During 1953, 810 persons were examined at the Regional Clinic, and 832 were re-examined. The ophthalmologists attached to the clinic made, during the year, 348 home visits. Of the total number of cases examined for the first time 551 were certified as being blind.

Applicants for certification were referred to the clinic by diverse agencies. The largest single source was the National Assistance Board who referred for examination 590 persons who had applied to them for increased assistance. The table below shows the source of candidates for certification :—

Applicants for increased National Assistance	...	...	590
Applicants for Registration as Blind Persons	...	...	146
Applicants for Blind Pension	...	...	26
Applicants for Technical Training	...	...	19
Applicants for Free Tramway Pass	...	...	1
Others	...	...	28

Table A shows the age and sex distribution of the 810 persons examined for the first time. It will be seen that the heaviest incidence was in the later years of life and that amongst the certified group females considerably outnumbered males. This was in accordance with the findings of the last three years, while previously the sexes had been equally represented.

TABLE A.

Age	Certified			Not Certified		
	Males	Females	Total	Males	Females	Total
—1	—	—	—	—	—	—
1-4	3	3	6	2	2	4
5-15	8	4	12	—	1	1
16-29	10	6	16	7	1	8
30-39	3	5	8	7	2	9
40-49	15	11	26	11	13	24
50-59	35	23	58	13	14	27
60-69	50	74	124	27	35	62
70+	118	183	301	60	64	124
	242	309	551	127	132	259

Of the 810 new cases examined 337 were resident in the Glasgow area and 161 in Lanarkshire.

Table B shows the allocation among local authorities of applicants examined during 1953 in the area of the Joint Committee :—

TABLE B.

			Certified			Not Certified		
			Males	Females	Total	Males	Females	Total
Glasgow	...	...	111	122	233	52	52	104
Airdrie	...	...	2	2	4	2	1	3
Coatbridge	...	...	4	9	13	5	2	7
Hamilton	...	...	4	3	7	4	2	6
Motherwell & Wishaw			5	10	15	5	4	9
Rutherglen	...	...	4	5	9	3	1	4
Other Lanarkshire	...		28	27	55	10	19	29
Greenock	...	...	5	11	16	3	4	7
Paisley	...	...	6	4	10	5	4	9
Port Glasgow	...		3	2	5	1	2	3
Other Renfrewshire			6	20	26	8	5	13
Dumbarton	...	...	3	4	7	2	—	2
Clydebank	...	...	2	2	4	2	4	6
Other Dunbartonshire			6	13	19	2	3	5
Falkirk	...	...	2	7	9	3	1	4
Stirling	...	...	4	4	8	2	—	2
Other Stirlingshire	...		17	16	33	6	11	17
Ayr	...	...	6	4	10	4	2	6
Kilmarnock	...	...	3	2	5	1	—	1
Other Ayrshire	...		16	22	38	6	9	15
Argyll County	...		5	10	15	1	2	3
Bute County	...		—	3	3	—	4	4
Dumfries Burgh	...		—	7	7	—	—	—
Not stated	...	...	—	—	—	—	—	—
			242	309	551	127	132	259

As has already been mentioned 132 cases were re-examined during the year. These were cases examined previously but, owing to some altered circumstances or following the person's own request, were reviewed during 1953.

Follow-up Scheme.—This scheme deals with those patients examined by the Regional Clinic and considered by the examining surgeon as likely to benefit from further treatment. The scheme has been made possible by the co-operation of the Mission to the Outdoor Blind for Glasgow and the South-West of Scotland. The home teachers make special enquiries twice yearly regarding such patients and report progress. When operative or other treatment had been completed, the patient is re-examined and the improvement or

otherwise noted. During the year the teachers investigated 87 cases certified blind with the following results :—

Treatment Recommended	No. of Cases	TREATMENT CARRIED OUT		TREATMENT NOT CARRIED OUT		Unwilling	Unfit	Others
		Still Blind	Not now Blind	Died				
Surgical ...	74	4	4	5		25	21	15
Medical ...	13	7	1	2		—	—	3
	<u>87</u>	<u>11</u>	<u>5</u>	<u>7</u>		<u>25</u>	<u>21</u>	<u>18</u>

The group entitled in the table “unwilling” is composed mainly of elderly people who, owing to their advanced age, do not feel inclined to undergo an operation. The group “others” numbering 18 in the table consists of patients who for some medical reason are not yet ready for operative procedures, *e.g.*, patients whose cataract has not yet “matured.”

TABLE C.
CAUSES OF BLINDNESS.

The causes of blindness of the 551 cases certified blind during 1953 are shown in the following table :—

Congenital and Undetermined—

Congenital abnormalities and developmental defects	35
Tumour of globe and orbit	...	...	1
Myopia	...	...	75
Other errors of refraction	...	...	—
Glaucoma, primary	...	...	87
Cataract, primary	...	...	145
Other primary ocular defects (primary detachment)	...	...	4

Infectious and Toxic—

(a) Exogenous :

Ophthalmia neonatorum	...	...	...	...	...	...	1
Trachoma	...	...	...	...	...	...	1
Local septic infection of coats of eye	...	...	...	...	...	...	16
Other local specific infections (gonorrhoea)	...	...	...	...	...	...	1

(b) Endogenous :

Gonorrhoea	...	...	...	...	...	...	—
Syphilis, congenital	...	...	...	...	...	...	3
Syphilis, acquired, including not definitely congenital	...	...	...	...	...	...	2
Specific fevers (smallpox)	...	...	...	...	...	...	—
Meningitis (non-tuberculous), including cerebro-spinal fever	...	...	...	...	...	...	1
Tuberculosis	...	...	...	...	...	...	1
Phlyctenular and strumous, not definitely tuberculous	...	...	...	...	...	...	2
Septicæmia, acute	...	...	...	...	...	...	—
Septicæmia, chronic ; autotoxic, focal sepsis	...	...	...	...	...	...	35
Other general infections and organismal diseases	...	...	...	...	...	...	1

Traumatic and Chemical—

Birth trauma	...	...	...	...	...	...	...	2
Non-industrial trauma		...	...	...	...	...	...	6
Industrial trauma	...	...	...	...	...	...	...	2
War trauma	...	...	...	...	...	...	...	—
Trauma, category not ascertainable	...	...	...	...	...	...	...	—
Chemico-toxic, non-industrial (tobacco)	...	...	...	...	...	...	...	3
Schedules industrial diseases (lead) (pyroxin) (carbon bi-sulphide)								
(anilene) (phosphorus) (glass-blowers' cataract) (metal workers' cataract) (miners' nystagmus)	...	...	...	...	...	...	...	2
Sympathetic ophthalmia	...	...	...	...	...	...	...	—

Systematic Diseases—

Anaemia and blood diseases	...	...	...	...	...	...	...	1
Diabetes	...	...	...	...	...	...	...	36
Nephritis	...	...	...	...	...	...	...	—
Pregnancy	...	...	...	...	...	...	...	—
Vascular diseases including cerebral vascular lesions	...	...	...	...	...	...	...	68
Intracranial neoplasm	...	...	...	...	...	...	...	7
Other diseases of central nervous system	...	...	...	...	...	...	...	5
Functional disturbances	...	...	...	...	...	...	...	—
Other general diseases	...	...	...	...	...	...	...	1

Not Ascertainable Definitely 7

Total 551

The largest number is included in the category "Congenital and Undetermined" and the most important individual causes of blindness were cataract, glaucoma, myopia, vascular disease, diabetes, congenital abnormality and septicaemia.

SECTION VII.

PORT HEALTH AUTHORITY.

The provisions of the Public Health (Ships) (Scotland) Regulations, 1952, dealing with the control of infectious disease on incoming vessels, were applied by the Port Health Inspectors on duty at the Glasgow Boarding Station at Greenock.

Close co-operation and a cordial relationship were maintained with the Officers of the Customs and Excise and the Pilots of vessels, who are regularly supplied with the lists of infected ports, which are compiled from the "Weekly Record" issued by the World Health Organisation.

There was a slight increase in the number of vessels entering the port during the year, the total being 7,356 vessels with a capacity of 8,396,745 tons. One thousand four hundred and thirty-seven of these vessels with a capacity of 4,555,424 tons arrived from foreign ports; 234 vessels arrived direct from infected ports; and 674 *via* coastwise ports, while 529 vessels arrived from non-infected ports.

Five thousand nine hundred and nineteen coastal vessels of 3,841,321 tons entered the port during the year. Included in the foregoing there were 331 vessels from Eire.

Particulars of arrivals are given in the following table :—

NATIONALITY OF VESSELS ARRIVING DURING 1953.

Nationality					Ships	Crews	Passengers
British	...	...	...	...	982	53,949	858
Belgian	...	...	...	...	11	209	—
Costa Rican	...	...	...	...	1	42	—
Danish	...	...	...	...	15	488	2
Dutch	...	...	...	...	86	1,193	1
Egyptian	...	...	...	...	1	57	12
Finnish	...	...	...	...	9	254	—
French	...	...	...	...	3	121	—
German	...	...	...	...	13	276	2
Greek	...	...	...	...	6	203	—
Honduran	...	...	...	...	3	88	—
Icelandic	...	...	...	...	5	213	377
Indian	...	...	...	...	13	852	1
Israelian	...	...	...	...	5	172	11
Italian	...	...	...	...	12	376	—
Japanese	...	...	...	...	1	48	—
Liberian	...	...	...	...	1	22	—
Monrovia	...	...	...	...	1	35	—
Norwegian	...	...	...	...	119	3,581	18
Panamanian	...	...	...	...	8	286	—
Polish	...	...	...	...	1	51	—
Portuguese	...	...	...	...	2	79	—
South African	...	...	...	...	3	144	—
Spanish	...	...	...	...	12	410	—
Swedish	...	...	...	...	62	2,010	8
Swiss	...	...	...	...	5	212	—
U.S.A.	...	...	...	...	54	3,921	7
Yugoslavian	...	...	...	...	3	111	—
					<u>1,437</u>	<u>69,403</u>	<u>1,297</u>

TONNAGE OF VESSELS ARRIVING DURING 1953.

					No. of Ships	Crews	Net Reg. Tonnage
January	...	...	...	...	117	5,614	377,657
February	...	...	...	...	94	4,472	296,460
March	...	...	...	...	108	5,711	368,855
April	...	...	...	...	124	6,101	412,365
May	...	...	...	...	121	5,625	387,437
June	...	...	...	...	111	6,320	386,661
July	...	...	...	...	122	5,267	371,307
August	...	...	...	...	123	5,667	349,046
September	...	...	...	...	125	6,043	376,919
October	...	...	...	...	132	6,104	404,591
November	...	...	...	...	123	6,272	406,730
December	...	...	...	...	137	6,207	417,396
Total					<u>1,437</u>	<u>69,403</u>	<u>4,555,424</u>

NATIONALITY OF SHIPS' CREWS ARRIVING DURING 1953.

	Other Nationalities				Total Crews on		Crew on Other Ships	Overall Total Crews	Total Passengers		
	British	Indian	Chinese	on British Ships	British Ships	on British Ships			on British Ships	on Other Ships	Civilian Total Passengers
January ...	2,814	1,411	325	184	4,734	880	5,614	17	—	17	17
February ...	2,513	898	164	86	3,661	811	4,472	57	—	57	57
March ...	2,597	1,330	268	223	4,418	1,293	5,711	10	—	10	10
April ...	3,244	1,437	169	94	4,944	1,157	6,101	10	15	25	25
May ...	3,034	1,234	215	181	4,664	961	5,625	131	3	134	134
June ...	3,157	1,221	193	287	4,858	1,462	6,320	154	6	160	160
July ...	2,835	883	156	127	4,001	1,266	5,267	108	200	308	308
August ...	3,229	1,041	229	87	4,586	1,081	5,667	119	194	313	313
September ...	3,235	1,019	147	193	4,594	1,449	6,043	76	10	86	86
October ...	3,145	1,149	234	125	4,653	1,451	6,104	97	1	98	98
November ...	2,986	1,366	209	285	4,846	1,426	6,272	64	6	70	70
December ...	3,505	1,178	73	120	4,876	1,331	6,207	15	4	19	19
Total ...	36,294	14,167	2,382	1,992	54,835	14,568	69,403	858	439	1,297	1,297

NUMBER OF SHIPS FROM FOREIGN PORTS AND IRISH FREE STATE DURING 1953.

Month.	FROM INFECTED PORTS.						FROM NON-INFECTED PORTS. Direct and Coastwise.						FROM FOREIGN PORTS.			From Irish Free State
	Class " A "—Direct.			Class " B "—Coastwise.			Total " A " and " B."			TOTAL.						
	Ships	Crews	Pass-engers	Ships	Crews	Pass-engers	Ships	Crews	Pass-engers	Ships	Crews	Pass-engers				
January	26	901	15	59	3,716	1	85	4,617	16	32	997	1	117	5,614	17	22
February	12	974	53	46	2,383	—	58	3,357	53	36	1,115	4	94	4,472	57	21
March	20	1,208	10	56	3,452	—	76	1,051	10	32	5,711	—	108	5,711	10	32
April	18	761	19	65	4,051	1	83	4,812	20	41	1,289	5	124	6,101	25	28
May	23	873	35	62	3,600	—	85	4,473	35	36	1,152	99	121	5,625	134	28
June	22	1,731	56	49	3,215	2	71	4,946	58	40	1,374	102	111	6,320	160	22
July	21	872	21	52	2,865	—	73	3,737	21	49	1,530	287	122	5,267	308	29
August	15	617	17	54	3,292	1	69	3,909	18	54	1,758	295	123	5,667	313	28
Sept.	25	1,515	35	50	3,000	—	75	4,515	35	50	1,528	51	125	6,043	86	34
October	14	735	25	61	3,522	1	75	4,257	26	57	1,847	72	132	6,104	98	35
November	14	828	5	57	3,787	1	71	4,615	6	52	1,657	64	123	6,272	70	28
December	24	1,292	11	63	3,271	—	87	4,563	11	50	1,614	8	137	6,207	19	24
TOTAL	234	11,607	302	674	40,154	7	908	48,852	309	529	21,602	988	1,437	69,403	1,297	331

INFECTIOUS DISEASE.

There were no cases of plague, cholera, yellow fever, smallpox, typhus or relapsing fever found on any of the vessels arriving at the port during the year.

There was, however, a need for precautionary measures in regard to H.M.T. "Empire Clyde" which arrived at this port on the 26th April. The vessel had embarked troops in the Suez Canal Zone and left Port Said on the 14th April to arrive at Liverpool on the 23rd April. Disembarkation took place on the 24th April and the vessel then sailed for Glasgow. The provisions of the Public Health (Ships) Regulations relating to the Declaration of Health by Masters of vessels arriving direct from overseas ports had therefore been carried out by the Liverpool Port Health Authorities. On arrival at Glasgow, information came to light that, while the vessel was at Liverpool, two children had been removed with chickenpox and a woman passenger with Bacillary dysentery. Arrangements were made to carry out the washing and disinfection of infected bedding, and the accommodation occupied by the patients. A telephone message from the Department of Health for Scotland was received on the 28th April intimating that one of the servicemen who travelled on this vessel had sickened with a rash which was thought might be smallpox. There was a doubt about the diagnosis in view of the fact that the patient had been vaccinated three times and that there was no smallpox in the Canal Zone. There was, however, a report of smallpox in the Sudan at that time.

The vessel was visited on the 29th April and arrangements were made to carry out the disinfection of all the troop accommodation and the hospital. All bedding, hammocks, etc., had been removed to the Sea Transport Depot at Barrhead for dispatch to the laundry. On returning to the office a message was received from the Superintendent of the Shipping Company stating that information from their office at Liverpool confirmed the case as one of smallpox. On receipt of this information the Sea Transport Officer at Barrhead Depot was advised to retain all bedding, hammocks, etc., until further instructions from this Department.

Information from the Department of Health on the 30th April stated that the smears and complement fixation tests were both negative, and that the "egg test" would be ready on the 1st May. The clinicians were of the opinion that the case was one of smallpox although epidemiologically it did not seem likely.

On the 1st May information was received that the egg tests were negative but it had been decided to treat the case as one of smallpox.

The necessary precautions and period of surveillance were carried out, the last date of contact with the ship being the 24th April.

Members of the crew who were standing-by the ship were examined and revaccination was carried out where necessary. Lists of contacts, *i.e.*, members of the crew who were on leave, were compiled and notifications were dispatched to the Medical Officer of Health for each area to which contacts had proceeded. Daily visits were made to the vessel to ascertain the state of health on board.

Disinfection of 98 rooms in the Troop Sections and Isolation Hospital had been carried out by this Department on the 30th April as a precautionary measure. Particular attention had been given to Room 42, in A Section, which had been occupied by the suspected case and all the beds which had been stored in two rooms were sprayed. Four of the beds, including those from Room A.42, were removed to the disinfecting station for treatment.

Arrangements were made to have all bedding, etc., stored at the Sea Transport Depot, removed for disinfection. The staff at this Depot, which numbered approximately 30 persons, were vaccinated.

The contacts were seen daily until the 8th May without further cases being reported and precautionary measures were then terminated.

The wholehearted co-operation and willing assistance of the Shipping Company's staff and the ship's crew were greatly appreciated by this Department and enabled the precautionary measures to be put into action with the minimum of delay.

The number of cases of minor infectious disease and other cases of illness reported on vessels on arriving at Glasgow shows a decrease in comparison to the preceding year.

CASES OF ILLNESS REPORTED ON VESSELS ON ARRIVAL AT GLASGOW.

Disease	Removed to Hospital	Sent Home	Referred to Clinic	Left on Board	Died	Total
Chickenpox ...	—	—	—	1	—	1
German Measles ...	3	—	—	—	—	3
Lobar Pneumonia ...	4	—	—	—	—	4
Pneumonia ...	2	—	—	—	1	3
Malaria ...	1	—	—	2	—	3
Medical Observation ...	9	—	—	—	—	9
Mental Observation ...	2	—	—	—	—	2
Mumps ...	1	—	—	—	—	1
P.U.O. ...	3	—	—	—	—	3
Scarlet Fever ...	1	—	—	—	—	1
V.D. ...	2	—	3	4	—	9
Other Diseases ...	51	2	—	6	2	61
Total ...	79	2	3	13	3	100

REPORT ON CASES OF ILLNESS OCCURRING ON VESSELS DURING THE VOYAGE.

Disease	Disposal
Dropsy	Landed at Durban.
Stricture	Landed at Greenock.
Malaria	Landed at Manchester.
V.D.	Landed at Bombay.
Pyorrhoea	Landed at Famagusta.
Stomach Ulcers	Landed at Waterford.
Pleurisy	Landed at Famagusta.
Enteric Fever	Landed at Tilbury.
Diabetes	Died. Buried at Falmouth.
Acute Pneumonia	Landed at Montreal.
Stomach Trouble	Landed at Birkenhead.
Malaria	Landed at Port Harcourt.
Sickness	Landed at Dublin.
Cardiac Failure	Died. Buried at Sea.
Bacillary Dysentery	Landed at Liverpool.
Heart Failure	Died. Buried at Montreal.
Bowel Obstruction	Landed at Penzance.
Dermatitis	Landed at Avonmouth.
Bowel Complaint	Landed at Avonmouth.
Stomach Complaint	Landed at Liverpool.

IMMUNISATION AGAINST YELLOW FEVER.

The Glasgow Corporation Health and Welfare Clinic is recognised by the World Health Organisation as an International Centre for this purpose and the official stamp of the Centre is used on all international certificates. During the year the Port Medical staff provided 1,853 seamen on vessels destined for foreign ports with immunisation against Yellow Fever.

DANGEROUS DRUGS (NO. 3 REGULATION), 1923.

(*Amending the Dangerous Drugs Regulations, 1921*).

During the year 25 certificates were signed by the Port Medical staff authorising the masters of foreign vessels in the Port to purchase scheduled dangerous drugs under this Regulation in order to complete the necessary medical equipment of their vessels. These certificates are marked by the supplier with the date of supply and retained by him for the purpose of inspection.

ALIENS ACT, 1920.

Medical Inspection of Aliens.—There was a decrease in the number of vessels carrying alien passengers arriving at the port and also in the number of aliens. The comparable figures for the year 1953 are 76 vessels with 275 passengers as against 93 vessels with 336 passengers during the previous year. There were no rejections on medical grounds. Close co-operation was maintained with H.M. Immigration Officers in the examination of these persons, and every assistance is provided by the shipping companies in intimating times of arrival and boarding.

The following table shows the number and nationality of aliens arriving at the port :—

Argentine	...	...	1	Israelian	...	...	5
Belgian	...	...	4	Norwegian	...	...	29
Czech	...	...	1	Polish	...	...	2
Danish	...	...	4	Portuguese	...	...	2
Dutch	...	...	15	Russian	...	...	4
Egyptian	...	...	4	Spanish	...	...	1
French	...	...	49	Swedish	...	...	7
German	...	...	4	Swiss	...	...	2
Greek	...	...	1	U.S.A.	...	...	54
Icelandic	...	...	86				

COMMON LODGING-HOUSES.

The Seamen's Hostel situated in Queen's Dock is managed by the Clan Line Steamers, Limited, and is reserved for the use of Indian or Pakistan seamen of all the shipping companies operating vessels manned by these Asiatics.

The inspection of this property for conformity with the Bye-laws is now carried out by the Port Inspectors.

It is a sound, substantial property, is well maintained, and has a cubic capacity which provides sleeping accommodation for 97 persons.

HYGIENE OF CREWS' ACCOMMODATION.

Routine inspection of the crew accommodation on all vessels arriving within the limits of the port was carried out by the inspectors during the year. When unsatisfactory conditions were found the facts were communicated to the masters of the vessels or sent to the owners. In all cases, remedial measures were applied, except in those instances where vessels were proceeding to other home ports for the purpose of repair and refit and arrangements had been made to carry out repairs, etc., at those ports. Notification of the conditions on these vessels were sent to the Port Health Authorities concerned.

The standard of cleanliness on the majority of vessels is very high, particularly on the modern vessel where every degree of comfort has been taken into consideration. One particular example of this was reported on a vessel of 4,267 tons owned by a London company.

With the exception of two (2 berth) cabins for boys, the entire crew was housed in single berth rooms. All the rooms were situated inboard and the intervening space between the accommodation and ship's side was fitted out as a lounge containing writing tables, armchairs and reading lamps. The accommodation was lined with polished wood and the deck covered with cork linoleum. Bed-lights were fitted over the bunks, a feature which has now become a standard

fitting in all vessels. The after end of the amidship accommodation was divided into two sections and fitted out as modern recreation rooms.

A spacious Crew-Cafeteria was installed to be used in common by all the crew (with the exception of the officers). The plastic topped tables accommodated four cushioned topped chairs. The Galley was in direct communication through a service hatch.

The Galley was "all electric" and designed for easy cleaning. A dough-mixer, bacon-cutting machine, potato peeler, a fish-fryer and many other labour-saving devices were included for quick service.

The wash-places contained spray baths with an ample supply of hot and cold water. Mirrors were fitted above each wash-hand basin.

A drying-room was provided and also a laundry with boilers, electric irons and wringers.

The hospital was divided into two wards and situated in a position well removed from the crew accommodation and unnecessary noise.

The ventilation throughout the vessel is mechanically controlled and regulated to give desirable temperatures in any climate.

New instructions applying to the construction of crew accommodation come into force on the 1st January, 1954, and will raise the standard of crew accommodation still higher.

The majority of the defects and nuisances were found in the older type of vessel, which is to be expected, and in most cases were due to neglect and the lack of regular inspection and discipline. The inspectors made 1,686 initial visits of inspection and 448 revisits to vessels during the year. Intimations in terms of Section 19 of the Public Health (Scotland) Act, 1897, were served on the masters or owners of 107 foreign-going vessels and 2 on coasting vessels. Verbal intimations were also given to the masters of 123 of the former type of vessel and 46 in the latter type. In addition to the foregoing, 64 intimations were made in regard to the locking-up of sanitary conveniences on vessels with a view to preventing nuisances arising.

Insect infestations in the crew accommodation of vessels which are being fumigated for the purpose of deratting are treated by increasing the quantity of HCN during the operation. In other cases they are treated with D.D.T. or mixture of Gammexane and pyrethrum, this operation being carried out by private companies. Many of the shipping companies have a contract with these firms and in most cases the degree of infestation is kept at a minimum. The crew accommodation on 57 vessels and the provision store-rooms of 18 vessels were treated with insecticides by these companies during the year.

The following tables indicate the type of defects and the number and nationality of the vessels on which they are located :—

					Coasters	Foreign Arrivals	Total.
<i>General Neglect—</i>							
Drinking Water Tanks	...	...	...	...	—	2	2
Accumulations of Garbage	...	...	...	...	1	15	16
Gear in Sleeping Compartments	...	...	...	...	—	3	3
					<u>1</u>	<u>20</u>	<u>21</u>
<i>Structural Defects—Accommodation—</i>							
Ports for Deadlights leaking	...	...	...	...	13	21	34
Dockheads leaking	...	...	...	...	5	18	23
Heating Apparatus defective	...	...	...	...	—	7	7
Floors broken	...	...	...	...	—	2	2
Lighting defective	...	...	...	...	—	—	—
Ventilation defective	...	...	...	...	—	—	—
Food Locker Doors broken	...	...	...	...	3	4	7
Steampipes leaking	...	...	...	...	—	5	5
					<u>21</u>	<u>57</u>	<u>78</u>
<i>Wash Places and Water-Closet Compartments—</i>							
Seats broken or missing	...	...	...	...	—	19	19
Doors broken or defective	...	...	...	...	—	4	4
W.C. Basins broken	...	...	...	...	—	4	4
Lighting defective	...	...	...	...	—	—	—
Ventilation defective	...	...	...	...	—	—	—
Wash Basins broken	...	...	...	...	—	1	1
Soilpipe or Storm Valve defective	...	...	...	...	—	23	23
Floors broken	...	...	...	...	—	6	6
					<u>—</u>	<u>57</u>	<u>57</u>
<i>Functional Neglect—Accommodation—</i>							
Paintwork dirty	...	...	...	...	1	36	37
Floors and Woodwork dirty	...	...	...	...	1	33	34
Tables and Benches dirty	...	...	...	...	7	39	46
Alleyways dirty	...	...	...	...	—	41	41
Food Lockers dirty	...	...	...	...	3	52	55
Verminous condition	...	...	...	...	2	160	162
Galleys dirty	...	...	...	...	—	12	12
Scuppers choked	...	...	...	...	3	34	37
Accumulation of Rubbish	...	...	...	...	2	20	22
Beds and Bedding dirty	...	...	...	...	—	—	—
					<u>19</u>	<u>427</u>	<u>446</u>
<i>Wash Places and Water-Closet Compartments—</i>							
Troughs of W.C. Basins foul or choked	...	...	...	...	—	23	23
Floors or Woodwork dirty	...	...	...	...	—	13	13
Paintwork dirty	...	...	...	...	—	21	21
Scuppers choked	...	...	...	...	—	23	23
Flushing Apparatus defective	...	...	...	...	—	19	19
Wash Basins dirty or choked	...	...	...	...	—	20	20
					<u>—</u>	<u>119</u>	<u>119</u>
					<u>41</u>	<u>680</u>	<u>721</u>

NUMBER AND NATIONALITY OF VESSELS ON WHICH DEFECTS WERE DISCOVERED.

	No. of Vessels	Defective
British (Overseas and Coasting Vessels)	1,231	248
Costa Rican	1	1
Dutch	86	1
Finnish	9	1
French	3	1
German	13	1
Greek	6	2
Honduran	3	1
Indian	13	1
Italian	12	1
Norwegian	119	2
Panamanian	8	7
Polish	1	1
Swedish	62	2
U.S.A.	54	1
	<u>1,686</u>	<u>272</u>

Premises within the dock area are kept under observation and in this respect 417 re-visits were made by the inspectors as follows—23 in regard to the Factory Act ; 41 in connection with Clyde Trust property ; 108 to dock canteens ; and 197 re public conveniences. Forty-eight visits were made in dealing with drainage alterations at new premises being constructed in Queen's Dock, Princes Dock and Shieldhall Wharf.

Drinking Water Tanks.—Samples of water used for dietetic purposes on the following vessels were taken as a result of complaints by members of the crew or on receipt of information from other Port Health Authorities :—

	Analyst's Report	Bacteriologist's Report
11.5.53	S.S. " Avismere " ... Water suitable for diet- Complaint by crew. etic purposes. Satisfactory samples obtained on 21.5.53 after tanks and calorifiers had been cleaned.	No pathogens isolated.
28.5.53	S.S. " Uskside " ... Water suitable for diet- Complaint by crew. etic purposes.	No pathogens isolated ; little organic matter in tank which sup- ports bacterial growth.

Tanks cleansed and refilled 3.6.53.

24.6.53	S.S. "River Fisher" Letter from Liverpool ; crew suffering from boils and eye trouble.	Water suitable for diet- etic purposes.	No pathogens isolated ; Faecal B. coli present.
	The main tank was cleansed and washed at Bowling. A letter was sent to the owners to have the gravitation tank cleansed. Reply stated that all tanks had been cleansed at Garston.		
8.9.53	S.S. "River Crest" Complaint by crew.	Water slightly turbid and coloured but fit for human consump- tion.	Unsatisfactory for diet- etic purposes; Faecal B. coli present and bacterial count high.
	Tanks cleansed and refilled.		
7.12.53	S.S. "Linaria" Complaint by crew.	... Water suitable for diet- etic purposes.	

M.V. "Gartwood."—Information was received from Liverpool Port Health Authority that the drinking water in the starboard-tank of this vessel was unsatisfactory. The vessel was boarded on arrival at this port and the starboard tank which had been emptied and newly cleansed was examined and reported as satisfactory. The port-tank had also been cleansed and washed but could not be examined at this port without danger of contaminating the interior of the tank. The officer-in-charge of the vessel was advised to have it inspected on returning to Liverpool by which time it would be dry. The quick turn round of the vessel at this port prevented a sample of water being taken from the star-board tank.

M.V. "Gloucester."—A complaint was received from a shipping agent in Glasgow that an adverse report on the water supply of this vessel had been made by the Swansea Port Health Authority, and that the vessel had obtained the water at Glasgow before proceeding to Swansea.

Information on the amount of water taken by the vessel and the berths at which it was supplied was obtained from the Clyde Navigation Trust. Water had been supplied at five different berths.

The method of supplying domestic water to vessels in this port is through lengths of rubberised or leather hose from water-hydrants set in wells on the breast of the quay. These wells are protected by metal covers when not in use. The lengths of hose are stored on pegs in the waterman's box or immersed in water in wooden tubs or other Containers.

The usual practice when delivering a supply of water to vessels is to connect the hose to the hydrant and flush out the hose by opening the hydrant valve and letting the water flow through the hose into the dock. The hose is then connected to the intake-valve of the fresh-water tank on the vessel.

In view of this practice it was decided to take samples in two groups from each of the points used to supply the vessel. The first group from the first flush of water through the hose and the second group from water passing through the hose after it had been flushed with water, in the same manner in which it is supplied to vessels.

The hoses used in the operation were the same hoses which were used in supplying the vessel with the exception of the one used at the two supply points at the Graving Dock. The water supplied to the vessel at these latter points was delivered through a hose belonging to the vessel.

The bacteriological report on the first group of samples showed the bacterial counts per ml. on agar at 37°C. and 22°C., as from 4 to approximately 40,000 at the former temperature and 930 to 160,000 approximately at the latter temperature. Faecal B.coli and Faecal Streptococci were absent from 100 ml. in all samples. No pathogens were isolated from any of the samples. Moulds were reported in two of the samples and coliforms in all five. The samples contained appreciable deposit—brown amorphous matter—probably iron, some vegetable matter, and few diatoms, etc.

In the second group of samples the bacterial count per ml. on agar at the same temperature varied from 1 to 7 at 37°C. and 18 to 1,200 at 22°C. Faecal B.coli and Faecal Streptococci were absent from 100 ml. in all cases. No pathogens were isolated from any of the samples and there was much less deposit than in the first group.

In comparing the reports on both groups of water samples, one realises that any neglect in flushing through the hose before connecting it to the intake valves of the ships' tanks may possibly lead to a contamination of the water supply which could otherwise be avoided.

Every precaution was taken in obtaining these samples of water in order to achieve accurate results. The water supplied to the vessel at these points would be a mixture of Loch Katrine and Gorbals water as the main supply from Loch Katrine is linked up with the Gorbals water in this area.

Arrangements have been made with a representative of the Clyde Navigation Trust to carry out an inspection of all the water supply hydrants within the dock area, the condition of the hoses, and the methods of storage when not in use, and the effective drainage of the hydrant wells, etc. A report will be submitted when this has been completed.

RODENTICIDES AND INSECTICIDES.

The World Health Organisation Expert Committee on Plague suggested that the best method of deratting vessels with the new rodenticides, such as compound "1080," should be investigated. Meantime, however, the deratting of vessels with cyanogen compounds should continue.

In the application of these compounds one must bear in mind that, in the control of an insect-borne disease such as plague, insect control is supplementary to rodent-control, thereby introducing the use of insecticides.

A lecture on the properties of "1080" and a demonstration on the application of this compound took place in London during the month of October. I greatly appreciate the leave of absence granted to attend this meeting and demonstration and the opportunity of comparing the results of our experience in the use of this compound with that of other Port Health Authorities.

Sodium mono-fluoroacetate or "1080" is a white crystalline, semi-flocculent powder, very light in weight and easily disturbed by draughts. It is highly soluble in water but not in fats or oils and is a stable compound but hygroscopic. As a solution in water it is colourless and odourless and is stated to be tasteless. An extraneous dye is added to the solution as a precautionary measure to distinguish it from plain water.

It is highly poisonous, having a lethal dose of approximately 4 milligrams per Kilogram of body weight, and there is no known simple first aid antidote.

In action, it is so rapidly absorbed in the digestive tract that a lethal dose can be taken before the act of poisoning is detected. In effect, it acts on the heart and central nervous system, rapidly producing paralytic signs, convulsions and heart failure.

In application, it is best used in water at a concentration of 0.3 per cent. or half-an-ounce to the gallon. The lethal dose for a black rat of 300 grammes in weight is about half a cubic centimetre.

The number of baiting points required for the operation depends on the surface area of the floors of the compartments to be treated. The baits are laid in triangular formation with a maximum distance of ten feet between points. The placing of the baiting point is a matter of some importance. Baits placed at the corners of the hatch coamings, near harbourage spots, such as dunnage and pipe casings, etc., or in dark corners and on rat-runs are the best points.

The conditions governing the use of Sodium Fluoroacetate, ("1080") by servicing companies are as follows :—

1. The "1080" powder employed shall contain not less than 90 per cent. pure sodium fluoroacetate, with an inert soluble substance.
2. "1080" is to be used in solution in clean fresh water, the concentration of "1080" to be not less than 0.25 per cent. nor more than 0.3 per cent.
3. The solution is to be laid in baiting cups holding approximately 1½ ounces and to be filled with one ounce of solution. The baiting cups of crater shape should be made of a material impervious to water. They should be so constructed as to be easily lifted from a flat surface with gloved fingers.
4. The solution of "1080" either in concentrate or in ultimate solution for use, viz., 0.25 per cent., shall not be made up in the area of the Port Authority but shall be prepared in suitable central premises and transported to the ship in an unbreakable container.
5. The container used for filling the baiting cups shall also be of unbreakable material and shall preferably have a device which delivers one ounce of the fluid into the baiting cup without dripping or overflow.
6. All containers other than baiting cups shall be clearly marked "'1080,' Poison" in large red letters.
7. The number of baiting cups laid shall conform to the numbers prescribed by the Health Inspector of the Port Health Authority supervising the operation and shall be carefully counted and at the end of the operation. All baiting cups so laid shall be accounted for and removed from the ship.
8. The residue of liquid in the baiting cups shall be collected at the end of the operation and may be kept for further use in a stock unbreakable container, for removal from the ship and the Port area.
9. "1080" baiting cups shall not in any circumstances be placed on any dunnage or cargo or, particularly, any article of food. If "1080" points are laid with the permission of the Inspector of the Port Health Authority in the presence of cargo, they shall be so laid as to avoid any possibility of contamination of cargo by "1080." This is particularly important in the case where foodstuffs are present in the area under control.
10. "1080" poisoning shall not be laid in any part of a ship where men are working and any compartment under treatment shall during the period of treatment be rendered inaccessible or forbidden of access to any persons other than representatives of the Port Health Authority and staff of the operating company. Whenever "1080" is laid notices shall be posted clearly visible to any person who may enter the space or may attempt to enter the space, warning them that poison bait is laid in the spaces. These notices shall be on a white background and have clearly printed on the surface in large red letters at least the following words :—

**POISON BAIT
DO NOT TOUCH.**

Such notices shall remain *in situ* until all baiting cups have been accounted for and removed.

11. All rats found at the end of the operation shall be carefully collected in a suitable receptacle such as a bag and be destroyed by burning.

12. All operators during the operation shall wear rubber gloves and smoking, eating or drinking shall be strictly prohibited from the beginning to the termination of the operation.
13. The operation shall be under supervision and control of a responsible operator appointed by the Company for that purpose, who shall conform to all reasonable instructions by a representative of the Port Health Authority as to the number of baiting points to be laid, the method and distribution of the baiting points. The Officer of the Port Health Authority will be responsible to the Port Medical Officer for the efficiency of the operation and for ensuring that the precautions outlined in these conditions are fulfilled. Any neglect to comply with the terms of this paragraph may lead to a refusal by the Port Health Authority to issue a Deratting Certificate.

S.S. "*Clan Macaulay*."—Deratting operations, in which the poison compound "1080" was used at the request of the Clan Line Steamers, Ltd., were carried out on the S.S. "*Clan Macaulay*" on the 25th August. This was the first occasion on which this poison had been used in the Port of Glasgow.

A routine search of the vessel on arrival was made by a searcher of this Department and as a result of preliminary trapping operations five rats were recovered.

The deratting operations commenced at 4 p.m. and 300 baiting points, each containing approximately one ounce of liquid poison, were placed on all deck surfaces; in the Forepeak, Forecastle Space, on each deck in every hold and in the Poop Space Aft which included the Native Crew's Accommodation, Galleys and Storerooms. Baiting points were also placed in the lifeboats. The placing of the baits was completed by 10 p.m. All the compartments which were under treatment were locked or otherwise secured to prevent unauthorised persons gaining access to these spaces. The lifting of the baiting points commenced at 6.30 a.m. the following day and was completed by 9.30 a.m. Five rats were recovered after the operation. Post baiting with wholemeal flour was carried out by the operating company but these remained untouched. The port searcher was instructed to resume trapping operations with a view to checking the clearance of the rodent infestation. On the morning of the 27th the searcher reported that he had trapped a rat in No. 4 Upper Tween Deck. This Compartment contained a considerable amount of harbourage.

The Superintendent of the Company had been advised to open up a telegraph casing which passed through the crew accommodation to the docking bridge on the poop. When this was done two nests, each containing six live young rats and five adult rats were recovered. Four of the adult rats were dead but the other one was not quite dead. These rats had no means of access to the "1080" poison and death was attributed to poison bait (other than "1080") which had been

used on the vessel at a previous port. These facts were confirmed later by a ship's officer who also stated that approximately 40 rats had been trapped by the members of the crew during the voyage home.

The evidence of live rats on the vessel after treatment had been carried out with " 1080 " is indicative of a weakness in the application of this method for the purpose of deratting vessels. Nesting female rats and young rats may not leave the nest during the period when the poison baits are in position, and consequently they do not touch the poison. Failure to exterminate the whole colony on the vessel means re-infestation.

The conditions governing the use of this poison stipulate that any compartment which is being treated must be vacated and locked while the baits are in position. The native crew accommodation was rat infested and therefore the crew had to be housed ashore over night. The fumigation of this vessel with the use of HCN could have commenced at 6 p.m. and the vessel returned to the owners at 7 a.m. the next day. Furthermore, when gas is employed it penetrates throughout the compartments resulting in the destruction of all the rats.

Trapping operations were carried out on this vessel for several days after the use of the poison to check for any further evidence of rat infestation with negative results.

This compound has been used in the U.S.A. for more than four years but recent information from New York reports that 75 per cent. or more of all the deratting operations of vessels is still being done by means of HCN fumigations, and the compound " 1080 " is used for the disinfestation of isolated compartments, in which the poison baits are left exposed for approximately 18 hours. D.D.T. dust is used at the baiting points to kill the fleas on the rats, a point which is a major factor in the control of plague.

In reviewing these facts one is aware of the importance of the time factor. In most cases the deratting of vessels has to be carried out as speedily as possible to avoid delay in schedule and HCN fumigation is the only satisfactory solution under these conditions as it rapidly penetrates throughout the compartments.

In the event of vessels being laid up for repair or overhaul and the rodent infestation confined to single compartments which could be securely locked, the use of " 1080 " could be used with satisfactory results.

INSECTICIDAL RESINS.

Aldrin and Dieldrin.—The Colonial Office and the Fungicide and Insecticide Research Co-ordination Service of the Agriculture Research Council have developed a new insecticide urea formaldehyde resin.

Experiments in the use of these resins have been carried out on board a number of vessels during the past two years and the satisfactory results have been substantiated by unsolicited testimonial from the shipping company. Vessels which have had persistent cockroach infestations in the past have been reported as 100 per cent. clear for a period of two years from the time of treatment.

The essence of the new treatment is the incorporation of a highly active insecticide, such as Dieldrin, in a Urea Formaldehyde Resin, which prolongs the effective action of the insecticide for a considerable period. In this type of formulation the insecticide is present as a super-saturated solid solution within the resin. The minute crystals which were precipitated on the surface are less than ten microns in length and are claimed to be much more toxic to insects than the larger crystals contained in the ordinary insecticide sprays.

Chlorinated hydrocarbon insecticides such as D.D.T. and Benzene hexachloride can be incorporated in the resin but for the effective control of the more resistant insects such as cockroaches it may be necessary to use Dieldrin, which is approximately eight times as lethal as D.D.T. to most insects; it is also more toxic to warm blooded animals than D.D.T. but with the resin formulations the bulk of the Dieldrin is safely sealed and a small proportion, in low concentration and less hazardous than normal deposits of D.D.T., is left exposed on the surface.

The synthetic resin is applied by means of a spray or brushed on the harbourages, where it rapidly sets as a hard transparent lacquer. A small proportion of the insecticide within this lacquer forms an invisible bloom of micro-crystals on the surface which becomes lethal to all insects which touch it. When the surface of the resin is scrubbed or washed with soap, detergents or caustic soda, a new bloom of micro-crystals is immediately formed and the surface is regenerated. The insecticidal action remains at a maximum efficiency for two or more years, as there is no gradual loss in toxicity; the action ceases abruptly, dropping from the peak plateau of high toxicity to zero. It has been stated that with this new type of insecticidal treatment there should be no development of resistant races of insects.

The phenomenon of blooming and the repeated regeneration is controlled by careful formulation in which the insecticide, resin,

plasticiser and solvents are balanced within the concentration limits for a metastable solution. The bloom may not develop if insufficient insecticide is used, and if an excess is employed the quantity of solute which the resin can maintain in metastable solution may be exceeded and crystallization will occur throughout the coating upon evaporation of the solvent.

RAT DESTRUCTION.

The total number of rats destroyed during the year was 1,858. Of this total 734 were destroyed on board foreign-going vessels as the result of HCN fumigations, and 333 by trapping and the use of poison baits. The number of rats destroyed on coastal vessels was 75, HCN fumigation accounted for 53 rats and the remaining 22 were destroyed by trapping.

The trapping of premises within the dock area resulted in the destruction of 716 rats. Twelve live rats were also recovered from the dock area for the Zoological Department at the University.

Negative reports were received from the City Bacteriologist on 318 rats which had been submitted for examination for *Bacillus pestis*.

The rat searchers made 2,920 visits and revisits to vessels within the dock area, and 2,319 inspections of sheds and other premises during the year.

Evidence of developing rat infestation were reported at Windmillcroft Quay where a quantity of cottonseed had been stored ; in the lofts of Berths 1 to 4 in Princes Dock which were being used as warehouses for the storage of grain ; and also at the Broomielaw. Intimations of these facts were given to the appropriate department of the Clyde Navigation Trust. Reports by the rat-searchers on subsequent visits to these premises indicated that the infestations were being brought under control. Rat infestation in premises used for the storage of food on behalf of the Ministry of Food is dealt with by the Rodent Section of the Department of Agriculture.

The demolition of the emergency food storage premises, adjacent to Shieldhall Wharf, was carried out at the beginning of the year and has reduced the harbourage for rats in that area.

Twenty-four visits were made to vessels at the outlying berths at the Finnart, Old Kilpatrick and Bowling oil-fuel jetties for the purpose of issuing Deratting and Deratting Exemption Certificates.

Requests from the builders of vessels under construction for advice on the rat-proofing of these vessels were dealt with during the year. In the event of rat-runs or harbourage being discovered during the

routine inspection of vessels entering the port, the masters or companies' representatives are informed and advice on appropriate measures to remedy the faults is submitted.

The rat-proofing of modern vessels has been the main factor in reducing the degree of rat infestation reported during recent years.

Particulars of the rats destroyed during the year are given in the following tables :—

ON BOARD FOREIGN-GOING VESSELS.

Method of Destruction.			Infected Ports.				Non-Infected Ports.				Total	
			R. Rattus		R. Norvegicus		R. Rattus		R. Norvegicus			
			M.	F.	M.	F.	M.	F.	M.	F.		
HCN	...	...	378	211	5	1	87	52	—	—	734
Trapping	...	...	158	107	—	—	42	26	—	—	333
Total			...	536	318	5	1	129	78	—	—	1,067

ON BOARD COASTAL VESSELS.

		R. Rattus.		R. Norvegicus.		Total
		M.	F.	M.	F.	
HCN	...	—	1	38	14	53
Trapping	...	9	7	2	4	22
Total	...	9	8	40	18	75

In addition, 534 mice were recovered as a result of fumigations.

CARGO SHEDS AND OTHER PREMISES.

R. Rattus.		R. Norvegicus.		Total.
M.	F.	M.	F.	
348	234	82	52	716

INTERNATIONAL DERATTING AND DERATTING EXEMPTION CERTIFICATES.

The total number of certificates issued during the year was 437. Deratting Certificates were issued to 57 vessels after fumigation with HCN and to 14 vessels where infestation had been removed by trapping and in one instance by a combination of trapping and poison baits ("1080"). The remaining 365 vessels were issued with Deratting Exemption Certificates, having been inspected and reported free of rodent infestation. Twenty-nine new vessels were granted Exemption Certificates.

Seven of the vessels fumigated with HCN were treated with concentrations of gas varying from nine to twelve ounces for periods of from nine to twelve hours. Four of these fumigations were for the

eradication of mice and insect infestations in the holds of the vessels, and the remaining three for reasons of combined rodent and insect infestations.

One vessel arriving at the shipbreakers' yard, reported as being rat-infested, was fumigated with HCN, resulting in the destruction of 64 rats. No certificate was issued in this case.

The evidence of heavy infestations of mice on foreign-going vessels has been reported again this year; in some instances it was limited to one or two holds, and in others the infestations extended to all the holds. These infestations appear to be confined mainly to vessels trading to Mediterranean Ports and to Burma and India.

PREVENTION OF DAMAGE BY PESTS ACT AND ORDER.

Rodent Control Certificates were issued to 76 vessels during the year. Seventy-four of these vessels were reported as clear of rodent and mice infestations at the time of inspection, but the other two were subjected to measures, one being trapped and the other fumigated with HCN before the certificates were issued.

The difficulty in dealing with these coastal vessels due to the rapidity of their turn-round in port has been alleviated to a considerable degree by the co-operation and assistance of the Glasgow Coastal Shipping Companies who anticipate the expiry date of the certificate and give, not only the time of arrival but, in addition, the time when the vessel will be completely discharged and available for searching. This latter factor saves a considerable amount of time by reducing the number of unnecessary visits to the vessels during the discharging of the cargoes.

RAGS, HAIR, HIDES AND BONES.

The following table shows the amount of imported rags, hair, hides and bones and country of origin :—

Source of Origin	No. of Ships	Rags. No. of Bundles	No. of Ships	Hair (Various) No. of Bundles	No. of Ships	Hides (Various) No. of Bundles	No. of Ships	Bones No. of Bags
Africa ...	—	—	1	24	8	355	6	663
Arabia ...	—	—	—	—	3	45	—	—
Australia ...	—	—	15	6,706	20	13,412	4	792
Canada ...	—	—	—	—	1	80	—	—
Egypt ...	9	3,736	—	—	—	—	—	—
Europe ...	5	879	—	—	6	2,364	2	638
India ...	3	159	11	10,949	34	13,905	46	57,703
Japan ...	10	2,560	—	—	1	32	—	—
Malaya ...	1	224	—	—	—	—	—	—
New Zealand ...	—	—	2	855	—	—	—	—
So. America ...	—	—	—	—	—	—	4	28,209
U.S.A. ...	—	—	5	1,992	4	3,132	—	—

ANTHRAX.

Eight specimens of goatskins from four Indian consignments were submitted to the City Bacteriologist who reported one specimen as positive for *B. anthracis* and the remaining seven as being negative. From two consignments of goatskins and one consignment of zebra skins from East Africa, six specimens were submitted to the City Bacteriologist. Two specimens from one consignment of goatskins were reported as positive for *B. anthracis*, the zebra skins and remaining specimens of goatskins being reported as negative. Eight specimens of goatskins from four consignments brought from Aden were also submitted to the City Bacteriologist. Two specimens each from two of the consignments and one specimen each from the other two consignments were reported as positive for *B. anthracis*. The remaining two specimens were reported as free from *B. anthracis*.

Notice of the Bacteriologist's reports was sent to the Medical Officers of Health of the areas receiving the consignments.

No cases of Anthrax were reported amongst the persons engaged on the discharge of the affected consignments.

IMPORTED FOOD REGULATIONS.

The examination of imported foodstuffs has been a major factor in the work of this Department during the year and has occupied a considerable amount of the inspectors' time in examination and re-examination. The relaxing of control by the Ministry of Food over imported foodstuffs and the increase in the number of private importations has been one reason, principally in regard to the issuing of condemnation certificates. Under Ministry of Food control one certificate would cover the whole consignment, whereas in dealing with private importations, each importer claims a certificate for his own part of the consignment.

The number of new "brands" of imported food products has increased considerably. These new products are given special attention until they are found to be satisfactory as a result of examination, over a number of separate consignments of each individual brand. The purpose of this special care results from past experience when consignments of new brands were found in an unsatisfactory condition due to faulty processing and canning.

During the year 680,945 tons of food products were discharged in the docks from overseas, with an additional 65,325 tons from coastal vessels trading within the limits of the British Isles and Eire. Samples

taken for the purpose of determining the condition of products were submitted to the City Analyst or the City Bacteriologist, depending on the composition of the product and the nature of the information required.

Six hundred and nine samples were submitted to the City Analyst who reported seventy-six of them as unsatisfactory. Forty-three samples were sent to the City Bacteriologist who gave a report of bacterial contamination in six of them.

As the result of these examinations and reports a quantity of food products totalling 15,805 cwts. was found unfit for human consumption and disposed of for use as animal feeding stuffs or for technical purposes under conditions which would prevent it being used for human consumption. When the damage was severe and the product could not be used for these purposes with any degree of security it was destroyed.

In most instances the degree of damage was slight or moderate and obviously due to crushing or rough handling. On the other hand where the damage was due to fire, or salt water, it was very extensive and involved the condemnation of large quantities of foodstuffs. A perusal of the tables included in this report will give an indication of the commodities involved.

Early in the year, 86 cases of bitter oranges which were dirty and stained were released for human consumption after each case had been reconditioned and the oranges washed to the satisfaction of the inspector.

A notice, in terms of the Public Health (Imported Food) Regulations in regard to twenty cartons of canned stewed steak, was received from the Customs Officer at the docks. These tins were removed to a store for a complete examination. Many of the tins were "blown" and there was evidence that it was due to imperfect processing, a fact which was confirmed by the bacteriological and analytical reports. The owner's representative, after being informed of the facts of the case, agreed to the destruction of the whole consignment. This was carried out under supervision.

Seventy-five pounds of vanilla icing which had been contaminated by rodents were removed for destruction, and similar action was taken with 200 pounds of coconut-ice which had the same contamination.

Three hundred and ninety-four bags of onions were condemned on the quay as unfit for human consumption and removed to the destructor. The weight of this particular parcel was 11 tons 15 cwts.,

but similar damage was experienced during the year and the final figure of this product totalled 20 tons 5 cwts.

Several shipments of potatoes were imported during the year, and although the majority of cargoes was satisfactory, several were in a really bad state at the time of the vessels' arrival in this port. The first shipment of these potatoes involved the destruction of 116 bags, having a weight of over three tons. Another shipment followed in which 37 tons were released for animal feeding stuffs, and 38 tons were destroyed. The worst shipment, however, involved the destruction of over a hundred tons. Part of this consignment was so bad that it was discharged directly from the hold of the vessel into the waggons provided for removing it to the destructor.

A hundred cases of sugared almonds which were heavily infested with insects were condemned as unfit for human consumption as no practical means of reconditioning them could be devised by the parties concerned. The weight involved in this consignment was five tons.

Two bags of sugar (each holding two cwts.) were found on examination at the quay to be grossly contaminated by rodents and nesting material. These two bags were released to the Corporation Cleansing Department for use in the animal-feeding scheme.

Considerable quantities of rice which contained moulds and growths were sent for animal-feeding purposes or destroyed. A consignment of 106 bags of Dunn peas, weighing over 8 tons, was also sent for animal feeding, to be followed later by a further quantity of 2 tons 17 cwts.

Flour and grain formed the bulk of the weight of food condemned during the year, mainly because of the nature of these products. Every effort, however, is made to salvage these products and in the majority of cases the bulk of them goes for animal-feeding purposes or for technical purposes.

Fire damage on a vessel resulted in 12 tons of currants being sent for animal feeding stuffs and as the result of seawater, to a considerable depth in the hold of another vessel, over 150 tons of currants and sultanas in which fermentation had reached an advanced stage, were also released for this purpose.

Large consignments of canned meats and canned fruits formed part of the cargo in the hold of the foregoing vessel and were considerably damaged as a result of contact with the salt water and also by the heat generated in a consignment of seed which was in the hold.

The work involved reconditioning these products extended over a period of four months. Tins which at first appeared to be sound were found on closer examination to be perforated by small spots of rust due to the salt water. The position was further aggravated when tins which appeared bright and clean at the ends were found to be perforated by rust on the sides when the labels were removed.

Every possible care was taken in the examination and reconditioning of these canned products, especially in regard to the meats. Buffing of some of the very lightly rusted tins gave a clear indication of the danger in releasing the reconditioned tins for human consumption, and as a result of the turn-over only a very small portion of the consignment was released for that purpose. Part of the remainder was released for the purpose of animal-feeding under supervision, and the bulk of the consignment consisting of 39 tons of canned meats and $12\frac{1}{2}$ tons of canned fruits was removed to the Corporation destructor.

“ OFFICIAL CERTIFICATES.”

These certificates must accompany all consignments of meat or meat products imported into the country and are accepted as evidence that the products “ have been derived from animals which were free from disease at the time of slaughtering.” Failure to do so may lead to the re-exportation of the product or rejection as a commodity for human consumption.

During the year a consignment of 234 drums of edible beef stearine was landed at the docks and when examined no official certificate or stamps could be found. The consignment was therefore detained and the importer advised. Samples were taken for bacteriological and analytical purposes, and in both cases were reported as entirely satisfactory.

Correspondence with the importer in London indicated that he was unaware of the Government regulation in Australia, and produced documentary evidence from a private veterinary surgeon that the product had been derived from cattle which he had inspected before and after slaughter and found free from disease.

The product had been treated in the refinery at temperatures up to 350°F. and all processes carried out under hygienic conditions. The processes were—

- (a) wet refining to remove protein substances,
- (b) neutralised to remove acidity,
- (c) filtered and washed to remove soap formed in neutralisation,
- (d) deodorised to render it sterile, and
- (e) filtered for final clarification.

The facts and statement made by the importer and overseas' agents were certified by a Justice of the Peace.

These facts were intimated to the Department of Health. In view of the evidence submitted and satisfactory samples obtained at the docks, the consignment was released for human consumption. The importer, however, was warned that future importations under these conditions would not be permitted.

THE PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS.

Sampling of imported fruit, juices, pulp and syrups was carried out during the year and an excess of sulphite preservatives was found in 17 consignments, 9 in fruit juice, 7 in fruit pulp, and 1 in syrup.

These facts were brought to the notice of each importer and in every case a written undertaking was received as a guarantee that the sulphite preservative would be reduced to conform to the standard laid down by the above regulations.

METALLIC CONTAMINATION.

Several consignments of canned tomato purée and paste were imported during the year. These products are sampled to determine the amount of the copper content which has a provisional limit of 100 parts of copper per million parts of purée. In two instances excess of copper was reported by the City Analyst. Arrangements were made with the importer, who stated that he had large quantities in store with a very low copper content, to bulk and mix the purée containing the excess with the purée having a low copper content and thereby bring it within the provisional limit. This was carried out and the copper content was reported as being within the limit.

FOREIGN IMPORTS, 1953.

TABLE "A."

Article			Tons Cwts.		Article			Tons Cwts.	
Apples	...	...	5,885	—	Jams and Jellies	...	648	—	
Acids	...	...	15	10	Lard	...	139	—	
Bananas	...	...	23	15	Lemons	...	1,615	—	
Barley	...	...	61,965	—	Liquorice	...	14	10	
Beans	...	...	4,719	—	Maize	...	89,832	—	
Biscuits	...	...	150	—	Macaroni	...	212	—	
Butter	...	...	4,270	10	Meats (Canned)	...	4,684	—	
Cake Mixture	...	...	495	—	Melons	...	303	—	
Cheese	...	...	3,639	—	Milk (Canned)	...	32	—	
Cocoa	...	...	14	—	Milk (Powder)	...	91	—	
Coffee	...	...	665	—	Mincemeat	...	65	—	
Condiments	...	...	28	—	Nuts (Various)	...	29,316	—	
Confectionery	...	...	1,374	10	Oats	...	12,456	—	
Cream of Tartar	...	...	17	10	Oils	...	278	15	
Coconut (Desiccated)	...	...	2,841	—	Onions	...	7,673	—	
Eggs (Shell)	...	...	472	—	Oranges	...	37,871	—	
Eggs (Liquid)	...	...	360	—	Peel (Various)	...	326	—	
Eggs (Powder)	...	...	27	—	Peas	...	4,394	10	
Fats	...	...	1,490	—	Pears	...	1,226	—	
Farinaceous Foods	...	...	4,051	—	Potatoes	...	10,531	—	
Fish (Canned)	...	...	411	5	Pomegranates	...	107	—	
Fondant	...	...	163	—	Rice	...	4,147	—	
Fruits (Canned)	...	...	8,020	—	Soups (Canned)	...	1,265	—	
Fruits (Dried)	...	...	18,771	—	Sugar	...	16,055	—	
Fruits (Juice)	...	...	1,846	—	Sundries	...	132	—	
Fruits (Pulp)	...	...	787	—	Syrup (Fruit)	...	89	—	
Fruit Cake	...	...	93	—	Tea	...	781	—	
Flour	...	...	56,326	—	Tomatoes (Natural)	...	57	—	
Gelatine	...	...	18	—	Tomatoes (Canned)	...	188	—	
Ginger (Preserved)	...	...	586	—	Tomatoes (Juice)	...	278	—	
Grapes	...	...	1,161	—	Tomatoes (Puree)	...	1,740	—	
Grapefruit	...	...	2,718	—	Vegetables (Canned)	...	1,226	—	
Hams	...	...	9	10	Wheat	...	269,314	—	
Honey	...	...	36	—					

Total Weight—680,945 tons, 5 cwts.

COASTWISE IMPORTS, 1953.

TABLE "B."

Article	Tons	Cwts.	Article	Tons	Cwts.
Aerated Waters ...	528	15	Jams and Jellies ...	112	—
Apples ...	3,604	—	Lemon Curd ...	6	—
Bakers' Sundries ...	316	—	Meats (Canned) ...	513	—
Beans ...	107	—	Meats (Cooked) ...	787	16
Biscuits ...	52	—	Milk (Canned) ...	315	—
Cake Mixture ...	98	—	Milk (Powder) ...	119	—
Cheese ...	53	10	Nuts ...	417	—
Condiments ...	66	—	Oils ...	15	—
Confectionery ...	1,714	—	Oranges ...	525	—
Eggs (Shell) ...	20,116	—	Peel ...	38	15
Eggs (Liquid) ...	197	—	Peas ...	1,104	—
Fats ...	2,014	—	Potatoes ...	2,209	—
Farinaceous Foods ...	413	—	Potato Powder ...	528	—
Fondant ...	392	—	Rice ...	334	—
Flour ...	10,400	—	Sausage Meat ...	260	—
Fruits (Fresh) ...	600	—	Soups ...	611	10
Fruits (Canned) ...	2,384	—	Sugar ...	5,010	15
Fruits (Dried) ...	501	—	Sundries ...	630	—
Fruits (Juices) ...	162	—	Tea ...	87	—
Fruits (Pulp) ...	211	—	Tomatoes (Canned) ...	102	15
Fruit Cake ...	153	—	Tomatoes (Puree) ...	38	—
Fish (Canned) ...	10	10	Vegetables (Fresh) ...	260	—
Grapefruit ...	84	—	Vegetables (Canned) ...	1,718	—
Hams ...	3,003	—	Wheat ...	2,404	—

Total Weight—65,325 tons, 6 cwts.

The following foodstuffs were found unfit for human consumption and disposed of to the satisfaction of the Port Medical Officer.

Article	Cwts.	Qrs.	Article	Cwts.	Qrs.
Apples ...	5	2	Melons ...	47	—
Barley ...	1,711	—	Onions ...	405	—
Butter Beans ...	1	2	Peas ...	57	2
Cake Mixture ...	70	2	Peel ...	1	3
Coconut (Desiccated) ...	4	3	Potatoes ...	3,621	1
Confectionery ...	127	1	Rice ...	154	—
Cream (Artificial) ...	2	1	Sugar ...	4	—
Egg (Sugared) ...	1	—	Soups (Canned) ...	10	1
Farinaceous Foods ...	225	3	Syrup ...	3	2
Fats ...	19	—	Tea ...	1	2
Fish (Canned) ...	—	2	Tomatoes (Canned) ...	—	2
Flour ...	2,009	3	Tomatoes (Juices) ...	3	1
Fondant ...	6	—	Tomatoes (Puree) ...	45	1
Ginger (Preserved) ...	2	—	Vegetables (Canned) ...	2	—
Grain ...	1,296	1	Wheat ...	850	—
Grapes ...	—	3	Yeast ...	—	1
Ham ...	4	3	Ships Stores (Various) ...	27	—
Honey ...	—	2	Fruit (Canned) ...	351	—
Jams and Jellies ...	5	—	Fruit (Dried) ...	3,640	1
Lemons ...	22	3	Fruit (Juice) ...	26	2
Meat ...	1,083	—	Fruit (Pulp) ...	17	1

Total Weight—15,805 cwts., 3 quarters.

FOODSTUFFS EXAMINED BY CITY ANALYST.

Article			Fit for human consumption	Unfit for human consumption or not conforming to Regulations	Remarks
Apples ... ..	...	...	6	—	
Beans ... ..	...	...	11	5	Wet damage and weevil infestation.
Butter ... ..	...	...	10	—	
Cake Mixture ...	...	...	12	6	Wet damage—insect infestation.
Cereals ... ..	...	...	1	1	Mouldy.
Cherries (Preserved)	...	...	14	—	
Cheese ... ..	...	...	5	—	
Coconut (Desiccated)	...	...	5	—	
Condiments ...	...	...	8	—	
Confectionery ...	...	...	18	4	Rancid : Insect infestation : Contamination.
Corn Starch ...	...	...	1	—	
Eggs (Shell) ...	...	...	8	—	
Eggs (Sugared) ...	...	...	3	1	Fermentation.
Eggs (Liquid) ...	...	...	4	—	
Fats ... ..	...	...	18	—	
Fish (Canned) ...	...	...	8	—	
Flour ... ..	...	...	1	—	
Fondant ... ..	...	...	7	—	
Fruits (Canned) ...	...	...	58	—	
Fruits (Dried) ...	...	...	40	9	Wet damage : Fermentation.
Fruits (Preserved) ...	...	...	3	—	
Fruits (Juices) ...	...	...	16	9	Excess of SO ₂ in all cases.
Fruits (Pulp) ...	...	...	25	7	Excess of SO ₂ in all cases.
Fruit Cake ... ..	...	...	—	2	Wet damage.
Gelatine ... ..	...	...	2	—	
Grapefruit ... ..	...	...	3	—	
Grapes ... ..	...	...	—	1	Red Oxide staining.
Ginger (Preserved) ...	...	...	14	1	Extraneous contamination.
Ham and Bacon ...	...	...	2	4	Sour : Contamination.
Honey ... ..	...	...	3	—	
Jams and Jellies ...	...	...	7	1	Calcium chloride present.
Lemons ... ..	...	...	2	—	
Macaroni ... ..	...	...	2	—	
Meats (Canned, etc.)	...	...	85	8	Sour : Putrefaction.
Milk (Canned) ...	...	...	1	—	
Milk (Dried) ...	...	...	4	—	
Nuts ... ..	...	...	2	—	
Oranges ... ..	...	...	13	—	
Peel ... ..	...	...	15	—	
Pomegranates ...	...	...	1	—	
Potatoes ... ..	...	...	5	1	Wet damage.
Rice ... ..	...	...	14	8	Moulds : Oxide staining : Insect infestation.
Sago ... ..	...	...	2	1	Wet damage
Soups ... ..	...	...	4	—	
Sugar ... ..	...	...	1	2	Rat contamination.
Syrup ... ..	...	...	7	1	Excess of SO ₂ .
Tapioca ... ..	...	...	2	1	Wet damage.
Tea ... ..	...	...	8	—	
Tomatoes (Canned)	...	...	6	—	
Tomatoes (Juice) ...	...	...	11	—	
Tomatoes (Puree) ...	...	...	18	2	Excess copper.
Vegetables (Canned)	...	...	17	1	Blown tin.
			533	76	

SAMPLES SUBMITTED TO CITY BACTERIOLOGIST.

Article	Sound	Unfit	Remarks
Canned Stewed Steak ...	2	—	
Canned Brisket Beef ...	3	1	Putrefactive bacteria present.
Canned Corned Beef Loaf	3	—	
Canned Meats (various) ...	18	—	S.S. "Hector."
Canned Fruits	4	—	S.S. "Hector."
Edible Tallow	1	—	
Egg (Sugared)	—	1	Faecal B. coli present.
Egg (Albumen)	1	—	
Egg (Yolk)	1	—	
Artificial Cream	1	—	
Gammon	—	1	High Coliform count.
Glycerol Mono Stearate ...	2	—	
Pressed Beef	—	1	Faecal B. coli present.
Sugar	—	2	Rat urine and excreta present.
Walnuts	1	—	
	—	—	
Totals	37	6	
	==	==	

WILLIAM J. SMITH,
Senior Port Inspector.

The following statement submitted by the Corporation Veterinary Surgeon indicates the work done under the Foreign Meat Regulations during 1953 :—

EXAMINED.

<i>Beef—</i>				<i>Offal—</i>			
Quarters	...	...	66,761	Ox Tongues, Bags	...	426	
Cuts	...	...	21,070	Ox Tongue Roots, Bags	...	423	
Bags	...	...	17,098	Ox Cheeks, Bags	...	1,100	
Bags of Cuts	...	...	2,279	Ox Hearts, Bags	...	1,487	
Sausage Meat, Boxes	...	...	4,309	Ox Livers, Bags	...	1,466	
				Ox Livers, Boxes	...	218	
<i>Veal—</i>				Ox Stomachs, Bags	...	268	
Bags	...	...	513	Ox Kidneys, Bags	...	487	
<i>Mutton—</i>				Ox Tails, Bags	...	625	
Carcases	...	...	239,173	Ox Skirts, Bags	...	733	
Bags	...	...	4,230	Ox Sweetbreads, Bags	...	17	
Bags of Cuts	...	...	3,417	Cow Udders, Bags	...	1,541	
<i>Lamb—</i>				Calf Tongues, Bags	...	89	
Carcases	...	...	692,538	Calf Hearts, Bags	...	184	
Cuts	...	...	850	Calf Livers, Bags	...	216	
<i>Pork—</i>				Calf Livers, Boxes	...	225	
Carcases	...	...	1,209	Calf Kidneys, Bags	...	11	
Sides	...	...	40,248	Calf Sweetbreads, Bags	...	1	
Cuts	...	...	5,049	Sheep Tongues, Bags	...	4	
Bags	...	...	210	Sheep Hearts, Bags	...	1,767	
Bags of Cuts	...	...	13	Sheep Livers, Bags	...	1	
<i>Poultry—</i>				Sheep Livers, Boxes	...	2,679	
Fowls, Cases	...	...	400	Sheep Kidneys, Bags	...	369	
<i>Rabbits—</i>				Sheep Casings, Tierces	...	16	
Cases	...	...	445	Lamb Hearts, Bags	...	1,899	
				Lamb Livers, Boxes	...	7,298	
				Lamb Casings, Tierces	...	128	
				Pig Heads, Bags	...	5,180	
				Pig Hearts, Bags	...	90	
				Pig Livers, Boxes	...	968	
				Pig Livers, Bags	...	119	
				Pig Stomachs, Bags	...	111	
				Pig Kidneys, Bags	...	7	

CONDEMNED.

<i>Beef—</i>				<i>Lamb—</i>			
Quarters	...	...	3	Carcases	...	...	256
Bags	...	...	17	Cuts	...	...	5
Trimnings, Bags	...	...	2	Trimnings, Bags	...	...	16
Trimnings, Lbs.	...	...	65	Trimnings, Lbs.	...	...	63
<i>Mutton—</i>				<i>Pork—</i>			
Carcases	...	...	1,447	Sides	...	...	2,975
Quarters	...	...	1	Quarters	...	...	1
Cuts	...	...	91	Cuts	...	...	5
Trimnings, Bags	...	...	43	Trimnings, Bags	...	...	10
Trimnings, Lbs.	...	...	166	Trimnings, Lbs.	...	...	190

SECTION VIII.

HOUSING.

The total number of permanent houses completed during the year 1953 was 5,690, the highest number in any post-war year and only surpassed in one year in the last 30 years. The following table shows the rate of completion during the post-war years by the Corporation and the Scottish Special Housing Association :—

Year	Glasgow Corporation				Scottish Special Housing Assoc.	Total Permanent Houses from all Sources
	Direct Labour	Tra- ditional	Non-Tra- ditional	Total		
1945	... 491	—	—	491	—	491
1946	... 1,034	—	70	1,104	—	1,104
1947	... 1,004	120	282	1,406	100	1,506
1948	... 1,143	350	925	2,418	104	2,522
1949	... 1,597	479	1,557	5,633	378	4,011
1950	... 1,697	1,128	1,310	4,135	20	4,155
1951	... 2,152	537	1,050	3,739	100	3,839
1952	... 2,037	944	434	3,415	514	3,929
1953	... 2,726	2,044	372	5,142	548	5,690
	<u>13,881</u>	<u>5,602</u>	<u>6,000</u>	<u>25,483</u>	<u>1,764</u>	<u>27,247</u>

In addition, some 2,550 temporary bungalows have been erected and 1,692 dwelling-houses provided in requisitioned property. The Local Authority is proceeding to derequisition these latter properties and at the end of 1953 there remained only 462 dwellings under requisition. It is hoped to derequisition all the remaining dwellings before the end of 1954.

The total number and types of houses provided by the Corporation since the commencement of local government operations and let at 31st December, 1953, are shown in the following table :—

Ordinary Schemes	...	...	...	...	...	48,838
Temporary Houses	...	...	...	...	...	2,549
House Purchase Schemes	...	...	...	...	...	103
Intermediate Schemes	...	...	...	...	...	14,860
Redevelopment Schemes	...	...	...	...	...	155
Relhousing Schemes	...	...	...	...	...	14,781
City Factor's Department—Other Departments	...	...	...	...	...	4,102
Scottish Special Housing Association	...	...	...	...	...	1,758
Requisitioned Properties	...	...	...	...	...	462
						<u>87,608</u>

In spite of the very considerable number of houses which have been built in the post-war years, it is estimated that there are still some 112,000 applicants on the waiting list, as will be seen from the following table prepared by the City Factor :—

Date of Application							Estimated No. of Applications
Up to 31st December, 1935	...	...	...	...	...	...	4,000
1st January, 1936, to 31st December, 1943	...	...	...	...	...	...	7,000
1944	...	...	...	...	...	...	18,000
1945 or later	...	...	...	...	...	...	83,000
							<hr/> 112,000 <hr/>

(1) *Housing Policy*.—In November, 1953, the Department of Health for Scotland published a memorandum on “ Housing Policy in Scotland ” in advance of the presentation of the Housing (Repairs and Rents) (Scotland) Bill to Parliament. The memorandum and Bill had a two-fold purpose, to accelerate slum clearance and to repair and improve existing houses. Local Authorities are asked to make proposals for slum clearance on as wide a scale as possible and in order to reduce the urgent need for alternative accommodation, they are to be allowed to take over and maintain in use suitable houses in clearance areas and elsewhere subject to demolition and closing orders. Grants are to be available for the purchase and maintenance of these houses, subject to the supervision of the Secretary of State. To aid in the maintenance of the older houses, Part II of the Bill proposes an increase of 40 per cent. in the rent of controlled houses, provided the landlord can show that he has spent 60 per cent. of the rent in repairs in the course of twelve months or 120 per cent. in the three preceding years. The houses must be (a) in good and tenantable repair, and (b) not in any other respect unfit for human habitation. In order that the addition of the 40 per cent. will be available wholly for repairs and maintenance, it will not be taken into account in fixing the rateable value and owners' rates will be stabilised at their present poundage. Where the landlord and tenant cannot agree about the amount of money spent on a house during the twelve- or thirty-six-month period, there is recourse to the Sheriff. Where the tenant is not satisfied that his house is in good and tenantable repair or is in some other way unfit for human habitation, he can apply to the Local Authority for a certificate similar in nature to the Rent Restriction Certificates issued under the Rent Restrictions Acts. There are also proposals to encourage owners to undertake improvements and conversions by increasing the permitted expenditure and allowing the owners a greater return on improved or converted houses.

Considerable doubt has been expressed as to the ultimate value of this legislation in meeting in any degree the present housing situation as it makes no approach to the problem of the demolition of slum property or the rehousing of the tenants. When similar proposals were raised in the early twenties, the then Medical Officer of Health, Dr. A. K. Chalmers, said : " The areas most urgently requiring reform in Glasgow are those which are hopelessly over-built and the repair of the structural defects would in no way remove the graver objections which arise from defects in design and situation ".

Houses which are at present represented as unfit, whether under clearance area procedure or under closing and demolition orders, are unfit in all respects and cannot on any account be regarded as suitable for reconditioning. Repairs will do nothing to make them fit in any degree.

With regard to rent increases, it is probable that in many of the poorer types of houses the expenditure of 60 per cent. of the rent in repairs will not put them into good and tenantable repair. On the other hand, many better-class properties have been maintained in good repair but the owners cannot show that they have disbursed the statutory expenditure. Further, an increase in the rental of such houses may make them difficult to let.

Some improvement may be obtained, however, in the intermediate group of houses which will meet the provisions of the Bill and where the increase in rental will not amount to more than 5s. weekly.

Any increase authorised by the Bill in the rent of controlled houses is not to be taken into account for valuation purposes. Owners and occupiers will therefore continue to pay rates on present rateable value only and to make up the resulting loss in revenue the Local Authorities are empowered to levy an additional rate on all occupiers and owners of property other than controlled houses. These alterations in valuation and rating may fall rather heavily on owners and occupiers of premises excluded from the operation of the Bill.

(2) *Space Saving*.—The Housing (Repairs and Rents) Bill is an attempt to reduce the burden of housing taxation by maintaining in occupation houses which otherwise would require to be replaced by the Local Authority. Another attempt to reduce central and local taxation for housing is the space-saving proposals of the Department of Health for Scotland who have recommended new standards for " achieving economical design whilst maintaining adequate standards of living space and amenity ". Glasgow had already made some progress towards economy in design by reducing ceiling heights from 8 feet 6 inches to

8 feet and reducing the floor areas of dwelling-houses although not without considerable opposition. The standard ceiling heights of 9 feet and 8 feet 6 inches had been maintained for over 30 years and the reduction to 8 feet was regarded as a retrograde step. The new proposals of the Department of Health are therefore viewed with no enthusiasm and to date no decision to adopt the new standards has been taken by the Local Authority. The very real reduction in living space can be seen in the following table :—

	Three-Apartment		Four-Apartment	
	Area (Sq. ft.)	Volume (Cu. ft.)	Area (Sq. ft.)	Volume (Cu. ft.)
Glasgow—				
Post-War—T/1/4 8 ft. 6 in. ceiling	797	6,774	931	7,914
Current—T/6/4 8 ft. ceiling	722	5,776	845	6,760
D.H.S. Circular (14/54) 7 ft. 6 in. ceiling	685	5,137	780	5,850

Similar restrictions were issued in the 1920's and resulted in the erection in Scotland of a uniform type of house which gave a sameness and drabness to many otherwise pleasing areas. It was the unfavourable comparison between housing in Scotland and in Europe that made the then Secretary of the Department of Health in 1935 send a deputation of architects and others to see European housing. There followed a more liberal attitude to design, a lessening of restrictions and the development of local and individual ideas. This resulted in improved standards of architecture, both externally and internally, and added many attractive features to building development in Scotland.

The very marked development of high density building in the outskirts of the city, probably the highest of any Local Authority in Britain, makes it all the more necessary to maintain space standards within the houses. Where a semi-rural type of development is possible, as in many areas in England, it may be reasonable to reduce space standards within the houses as the house and garden are really one living space. In Glasgow, however, only 5 per cent. of houses in the new housing schemes have individual gardens as compared with 78 per cent. originally suggested in the Bruce Plan for the outer zone.

The saving in cost of adopting the Department of Health proposals is small. For the reduction in ceiling height from 8 feet to 7 feet 6 inches the exact saving is not likely to exceed £30 per house and if all these proposals are adopted, the saving would not exceed £100 to £150. In a city with 48 per cent. of one and two-apartments, where 75 per cent. of the new houses being built are of three apartments, and where 98 per cent. are erected in the tenement form, any reduction on present standards is a retrograde step of considerable magnitude.



(3) *Slum Clearance and Redevelopment*.—During the year the Local Authority passed a resolution declaring areas in the Gorbals Ward as clearance areas in terms of Section 25 of the Housing (Scotland) Act, 1950, and later resolved to secure the clearance of the areas by making a compulsory purchase order.

The slum clearance scheme, to be known as the Gorbals (Commercial Road) Clearance Areas, is the first post-war effort of its kind and was an excellent training ground for the Department in clearance area procedure.

The site of the areas was a rectangle bounded by Ballater Street, Commercial Road, Rutherglen Road and Lawmoor Street, as will be seen from the plan.

A detailed survey of the area shows that it contains 239 houses and in the areas marked 1, 2 and 3 there are 164 houses, 68 per cent., all unfit for human habitation.

The following table gives the distribution of the houses :—

GORBALS (COMMERCIAL ROAD) CLEARANCE AREAS.

Apartments	Clearance Area			Houses		Outwith Areas	Per-centage
	1	2	3	Total	Per-centage		
1	4	28	—	32	19·5	7	9·3
2	65	39	16	120	73·2	34	45·4
3	9	2	—	11	6·7	22	29·3
4	—	1	—	1	0·6	12	16·0
	<u>78</u>	<u>70</u>	<u>16</u>	<u>164</u>		<u>75</u>	

The whole rectangle contained 20 occupied business premises and three empty shops and also backland erections used as outhouses and yard for a scrap merchant's business and a two-storey erection used as a lock-up garage. Taking the areas alone, in No. 1 there was a shop factory and a shop, and in Area No. 2 one public house, which was later to raise important questions of principle.

The houses within the areas were some of the worst in the city. They were old and worn, suffering from external and internal decay and general disrepair. There were many defects of design, most of the houses being entered from long, dark lobbies, and they lacked adequate light and ventilation. The area was rat infested and some of the houses were affected by bugs and beetles. While all the houses had internal

water supply, only one house had an internal water closet. Most of the ground-floor houses suffered from rising damp and the top-floor houses from leaking roofs. The density within the rectangle and the areas is shown in the following table :—

GORBALS (COMMERCIAL ROAD) CLEARANCE AREAS.

	1	Clearance Areas 2	3	Total Rectangle	Gorbals Ward	City
Persons per acre	420	608	718	424	145	27
Houses per acre	98	151	155	87	37	8

The vital statistics, especially the infantile mortality rate and pulmonary tuberculosis death rate for the area also emphasised the very unsatisfactory nature of the locality as will be seen from the following table :—

GORBALS (COMMERCIAL ROAD) CLEARANCE AREAS.
VITAL STATISTICS FOR QUINQUENNium, 1948-1952.

	1	Clearance Areas 2	3	Gorbals Ward	City
Pulmonary tuberculosis— average annual death rate per 1,000 population ...	1.8	0.7	2.7	0.9	0.8
Infantile mortality rate per 1,000 live births ...	170	108	167	63	47

The compulsory purchase order was confirmed by the Secretary of State but the owner of the licensed premises in Area No. 2 appealed to the Court of Session. His case was founded on Section 25(1)(b) of the Housing (Scotland) Act, 1950—" . . . before passing a clearance resolution the authority shall satisfy themselves that accommodation available for the persons who will be displaced by the demolition of the buildings in the area exists or can be provided by the authority in advance of the displacements . . . ". It was claimed that there was nothing to justify the view of the Local Authority that alternative accommodation was to be available only in the case of people who lost their houses. The Local Authority pointed out that originally the section, before amendment by the Housing (Scotland) Act, 1949, stated " accommodation available for persons of the working classes who will be displaced by demolition of buildings " and referred to a similar case in England decided in favour of the Local Authority. The appeal by the proprietors of the public house was dismissed by the Second Division of the Court of Session.

Most of the properties in the areas and also outwith the areas making up the whole rectangle have been now purchased by agreement and the future of the site is being considered. The City Architect reported that if the site of Areas 1 and 2, along with the ground at 57/61 Commercial Road, were developed with four-storey tenements, all of three apartments, some 40 houses out of the 148 existing could be replaced, i.e., a 27 per cent. replacement. If the site was developed in ten-storey blocks, some 100 three-apartment houses could be erected, giving a 68 per cent. replacement. An initial investigation into some six areas, including the rectangle already discussed, was carried out before proceeding to consider the clearance area procedure. The areas extended from Waddell Street to Commercial Road and Adelphi Street to Rutherglen Road. Four of the areas east of Lawmoor Street contained in all 1,129 houses but only four houses could be regarded as unfit. In the sixth area there were 191 houses, of which 99 were unfit but the remaining houses were of a standard that would not permit of representation. This area was therefore abandoned as a possible clearance area and also because of the presence of a picture house and a church.

The problem of redevelopment and over-spill has been taken further by a report of the City Architect involving the whole of Hutchesontown Ward and part of Gorbals Ward. The report also deals with areas in Govan and Royston, as well as in Hutchesontown, etc., all of which had been declared areas of comprehensive development by the Local Authority, as Planning Authority, under the Town and Country Planning (Scotland) Act, 1947. The total area of the Hutchesontown-part Gorbals Scheme was 342 acres and included over 16,000 houses. For the purposes of phasing, the area bounded by Crown Street, Adelphi Street, Waddell Street/Sandyfaulds Street and Caledonia Road, containing some 5,000 houses, is being considered for the first ten-year programme but only some 11 per cent. of the houses in this area are unfit for human habitation. While this latter zone may show obsolete development as required under the Planning Act, it does not contain many of the worst houses in the city. An even more important factor is the question of the replacement, whether in four-storey or multi-storey development. Plans and models showing the redevelopment of the whole of Hutchesontown-part Gorbals by multi-storeys in eight, ten and fifteen storeys have been prepared but no decision has yet been made on the exact form of redevelopment of the area.

The over-spill from the area demands the construction of from three-quarters to half the number of houses outwith the area and this is the crux of the problem. The open spaces in the city are being rapidly

occupied by new building which has gone on at an increasing pace. No decision has yet been made by the Secretary of State on the proposals for a new town in Cumbernauld and the prospects of any wide measure of redevelopment in the near future are fading. Even with the modest proposals for slum clearance of some 1,000 houses per year, it has been necessary, because of the lack of alternative accommodation, to curtail representations drastically.

The less urgent proposals for wide-scale redevelopment under the Town Planning Act, therefore, appear likely to be stillborn and even limited redevelopment can only take place at the expense of slum clearance being shelved indefinitely.

REHOUSING OF TUBERCULOUS FAMILIES.

During 1953, 466 recommendations were made under the scheme for the rehousing of tuberculous families and 527 families were rehoused during the year, 153 being families recommended during 1953 and the others in previous years. The following table shows the number of families rehoused since 1934 :—

Year				No. of Families Recommended	No. of Families Rehoused
1934-1943	...	...	...	2,936	1,194
1944	...	...	...	391	166
1945	...	...	...	437	124
1946	...	...	...	462	220
1947	...	...	...	568	245
1948	...	...	...	593	326
1949	...	...	...	601	787
1950	...	...	...	706	480
1951	...	...	...	586	470
1952	...	...	...	537	376
1953	...	...	...	466	527
				<u>8,283</u>	<u>4,915</u>

During the year the Housing Committee considered the possibility of accelerating the rehousing of tuberculous families. The City Factor reported that of the 744 recommended families awaiting rehousing at 31st August, 263 were suitable for Ordinary houses, of whom 104 were unable to pay the rent of an Ordinary house, and the remaining 481 families required Intermediate or Rehousing type houses. The Committee agreed therefore to rehouse all the families suitable for Ordinary houses and, in the case of the 104 families, to let the houses at Intermediate rents. The remaining 481 families were to be rehoused

when suitable accommodation became available. These proposals have resulted in an increased number of families being rehoused in 1953 and for the second time since the scheme commenced in 1934, more families were rehoused than were recommended. At the end of 1953 some 714 families awaited rehousing.

The conditions experienced in the provision of suitable accommodation are shown in the following table :—

Recommendations—							
1st January, 1934, to 31st December, 1953 ...							8,283
Number of Families Rehoused—							
Rehousing ...	...	...	...	...	...	...	1,812
Intermediate ...	...	...	...	...	...	...	1,289
Ordinary ...	}	...	...	...	...	...	1,423
Super-Ordinary ...		...	...	...	...	...
City Factor's Houses and Others ...	...	...	...	...	...	...	144
Temporary Houses ...	...	...	...	...	...	...	247
Recommendations remaining but not yet rehoused—							
Refused offers ...	...	...	...	...	...	...	123
Did not reply ...	...	...	...	...	...	...	142
Gone away—new address not given ...	...	...	...	...	...	...	387
Cancelled ...	...	...	...	...	...	...	551
Returned to Medical Officer of Health for revision ...	...	...	...	...	...	...	—
Patient deceased ...	...	...	...	...	...	...	1,451
							<hr/> 7,569
Still to be dealt with ...							<hr/> 714

The summary of families rehoused since 1934 is shown in the following table :—

SUMMARY OF FAMILIES REHOUSED AT 31ST DECEMBER, 1953.

Recom- mended	1934- 1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	Total
1934 ...	263	—	—	—	—	—	—	—	—	—	—	263
1935 ...	284	—	—	—	1	2	2	—	—	—	—	289
1936 ...	137	4	—	2	—	2	11	—	—	—	—	156
1937 ...	117	—	4	2	—	—	4	—	—	—	—	127
1938 ...	105	2	1	1	8	—	—	1	5	1	—	124
1939 ...	71	4	—	6	2	7	2	—	—	—	—	92
1940 ...	41	5	3	2	1	2	2	1	—	1	—	58
1941 ...	73	11	3	5	5	5	4	1	1	1	—	109
1942 ...	62	14	8	2	2	6	9	3	—	1	—	107
1943 ...	41	88	24	29	5	11	34	7	5	1	—	245
1944 ...	—	38	40	30	22	26	23	5	2	1	—	187
1945 ...	—	—	41	90	27	38	39	4	9	1	1	260
1946 ...	—	—	—	51	90	51	54	18	5	6	3	278
1947 ...	—	—	—	—	72	90	120	24	16	6	3	331
1948 ...	—	—	—	—	—	86	240	44	25	9	4	408
1949 ...	—	—	—	—	—	—	243	136	49	18	10	456
1950 ...	—	—	—	—	—	—	—	236	190	51	34	511
1951 ...	—	—	—	—	—	—	—	—	163	183	69	415
1952 ...	—	—	—	—	—	—	—	—	—	96	250	346
1953 ...	—	—	—	—	—	—	—	—	—	—	153	153
<hr/>												
	1,194	166	124	220	245	326	787	480	470	376	527	4,915

SECONDARY PRIORITY SCHEME.

The City Factor reported to the Special Sub-Committee on Letting that he had found it difficult to give due consideration to certain health cases that had been brought to his notice, particularly cases where the applicant or a member of his family suffers from heart trouble, arthritis, disseminated sclerosis, paralysis, etc., and he suggested that the Medical Officer of Health might examine and classify such cases. Any recommendation under a secondary priority scheme would, of course, be only of added advantage depending on the date of application, the type and size of house required and the number of applicants on the priority waiting list. The proposals were examined and it was felt that some assistance might be given to these people provided it did not in any way influence the priority rehousing of recommended cases of pulmonary tuberculosis for Intermediate and Rehousing houses. A scheme of this type came into force at the beginning of 1954 but each case has required considerable investigation so that all the facts can be assessed.

DETERIORATION OF PROPERTY.

It has been found necessary to condemn either as dangerous or as unfit a further number of buildings, although the number becoming dangerous decreased. The wastage of houses over the last nine years is shown in the following table :—

Year	Medical Officer of Health				Master of Works		Grand Total
	Closing Order	Demolition Order	Slum Clearance	Total	Dangerous		
1945	...	3	10	—	13	232	245
1946	...	12	14	—	26	15	41
1947	...	160	114	—	274	355	629
1948	...	2	43	—	45	471	516
1949	...	15	90	—	105	718	823
1950	...	68	100	—	168	531	699
1951	...	129	26	—	155	329	484
1952	...	56	47	—	103	721	824
1953	...	171	176	164	511	114	625
		<u>616</u>	<u>620</u>	<u>164</u>	<u>1,400</u>	<u>3,486</u>	<u>4,886</u>

RENT AND MORTGAGE INTEREST RESTRICTION ACTS.

Applications during the year for Rent Restriction Certificates under these Acts amounted to 552. The following table shows the number of applications from 1938 to 1953 :—

Year	Applications	Year	Applications
1938	35	1946	271
1939	29	1947	672
1940	3	1948	323
1941	8	1949	480
1942	3	1950	493
1943	51	1951	243
1944	81	1952	299
1945	437	1953	552

Of the 552 applications, 355 were granted, 194 refused, and 3 were cancelled. Of the 16 applications by house factors for reports, 15 were granted and one refused.

OVERCROWDING.

The rehousing of families overcrowded under the 1935 Housing (Scotland) Act standards has not resulted in further overcrowding by succeeding families.

Size of House	No. of Houses Inspected	Over-crowding Removed	Over-crowding Reduced	Over-crowding Unchanged	Over-crowding Increased
One apartment ...	11,567	8,858	2,104	361	244
Two apartments ...	26,273	21,371	3,377	704	821
Three apartments ...	7,044	6,342	420	106	176
Four apartments and up	1,082	960	67	13	42
Total	<u>45,966</u>	<u>37,531</u>	<u>5,968</u>	<u>1,184</u>	<u>1,283</u>
Percentage	—	81·6	13·0	2·6	2·8

The labour involved in preparing the above table is out of proportion to the information obtained in the light of the present housing conditions in the city. The percentage of houses found to be again overcrowded out of the total of 45,966 is 18·4, a figure which has not varied by more than two per cent. in the past 15 years. In view of staff shortages it may be necessary to curtail the scope of this table.

UNINHABITABLE HOUSES.

During the year 347 dwellings were represented by the Medical Officer of Health to the Housing Committee as uninhabitable and a demolition order was made in respect of 176 and a closing order in respect of 171. As already mentioned, a clearance area was promoted in the Gorbals Ward, involving 164 houses, the details of which are shown in the following table :—

GORBALS (COMMERCIAL ROAD) CLEARANCE AREAS.
COMPULSORY PURCHASE ORDER, 1953.

Area	Address	Front Land	Back Land	1 Apt.	2 Apts.	3 Apts.	4 Apts.	Total Houses
1	63 Commercial Road	...	1	—	14	1	—	16
	67A	...	1	—	6	4	—	10
	67B	...	1	—	8	—	—	8
	71	...	1	—	4	—	—	4
	67/73	...	—	1	7	1	—	8
	73	...	1	—	3	7	1	11
	217/225 Rutherglen Road	...	1	—	7	2	—	9
	221B	...	1	—	7	—	—	7
	227/229	...	1	—	5	—	—	5
2	51 Commercial Road	...	1	—	17	7	—	24
	53A	...	1	—	1	10	1	12
	53B	...	1	—	9	2	1	12
	53C	...	1	—	—	10	—	11
	53D	...	1	—	1	10	—	11
3	110 Lawmoor Street	...	1	—	—	16	—	16
	Total	...	...	32	120	11	1	164

The total number of houses represented during the past 37 years and action taken is illustrated in the next table :—

Year	Number of Houses represented			Number of these Houses actually Closed in each Year		
	Under Slum Clearance Schemes	Under Closing and Demolition Orders	Together	Under Slum Clearance Schemes	Under Closing and Demolition Orders	Together
1917-1937	8,635	8,278	16,913	8,545	7,605	16,150
1938	—	467	467	89	914	1,003
1939	36	275	311	2	347	349
1940-1945	—	291	291	—	378	378
1946	—	26	26	—	26	26
1947	—	274	274	—	127	127
1948	—	45	45	—	155	155
1949	—	105	105	—	136	136
1950	—	168	168	—	115	115
1951	—	155	155	—	200	200
1952	—	103	103	—	96	96
1953	164	347	511	—	251	251
Totals	8,835	10,534	19,369	8,636	10,350	18,986

INSPECTION OF HOUSING SCHEMES.

(a) Condition as to Cleanliness.

During 1953 the nurse-inspectresses made 79,814 visits, the condition of the houses being recorded at the time of the visits as " Clean " 46,021, " Fair " 32,765, and " Dirty " 1,028. Further visits numbering 2,225 were made to the less satisfactory tenants.

The number of houses in the various rehousing schemes reported on is 14,925.

No. of tenants under supervision at 1st January, 1953	....	14,752	
Of which evicted or left owing rent during 1953	....	18	
Of which left voluntarily during 1953	....	511	
		<hr/>	529
Of which remaining as at 31st December, 1953	....	....	14,223
No. of tenants obtaining entry during 1953	....	....	654
Of which evicted or left owing rent during 1953	....	—
Of which left voluntarily during 1953	....	—
		<hr/>	<hr/>
Of which remaining as at 31st December, 1953	....	....	654
Total number of tenants remaining as at 31st December, 1953	....	....	<hr/>14,877 <hr/>

At the beginning of the year 14,752 households were under supervision, and at the end of the year 14,877. The increase of 125 households was due to the opening of Royston Re-development scheme containing 156 houses, 21 of which still remained to be occupied at 31st December, 1953. The number of new tenants was 654. There were 529 removals or 3·6 per cent. of the total occupancies.

The changes in the condition of the 14,223 households under supervision throughout the whole year were as follows :—

Condition at beginning of year—				Condition at end of Year				Group Percent- ages
				Clean	Fair	Dirty	Totals	
Clean	....	....	....	9,569	193	—	9,762	68·6
Fair	....	....	....	314	4,032	15	4,361	30·7
Dirty	....	....	....	—	20	80	100	0·7
Total	....	....	....	9,883	4,245	95	14,223	100·0
Group Percentages	....	....	....	69·5	29·8	0·7	100·0	—

A similar table is given for the 654 tenants who obtained entry during the year and were still resident in the scheme at the close :—

Condition at date of entry—	Condition at end of Year				Group Percentages
	Clean	Fair	Dirty	Totals	
Clean	218	12	—	230	35.2
Fair	20	401	2	423	64.7
Dirty	—	—	1	1	0.1
Total	238	413	3	654	100.0
Group Percentages	36.4	63.2	0.4	100.0	—

The condition prior to removal of the houses occupied by families who were evicted or left owing rent and by tenants removing voluntarily during the year is compared in the following table :—

Condition at date of Removal—	Tenants Evicted during 1953		Tenants Removing Voluntary during 1953	
	Number	Group Percentages	Number	Group Percentages
Clean	5	27.8	403	78.9
Fair	11	61.1	102	20.0
Dirty	2	11.1	6	1.1
Total	18	100.0	511	100.0

(b) *Bug Infestation.*

The total number of houses in which evidence of the presence of bed bugs was found was 73, or 0.52 per cent., as against 0.6 per cent. in 1952. Analysis of this figure shows that only a "trace" of bed bugs was found in 3 houses, or 0.02 per cent., as against 0.05 per cent. recorded in 1952. In this group of houses only old hatched eggs or bug casts but no living bugs or eggs were found in the beds or on furniture, pictures or other household belongings. In 46 houses, or 0.3 per cent., compared with 0.15 per cent. in 1952, a "medium" degree of infestation was found and by this is meant that living bugs or eggs were found in beds or on furniture, pictures or other household belongings, but not in the structure of the building itself. In 24 houses, or 0.2 per cent., compared with 0.4 per cent. in 1952, a "serious" degree of infestation was found. In these houses living bugs or eggs, or both, were found in beds, on furniture or on picture rails, skirting or door facings. Since the establishment of the D.T.D. Disinfestation Unit in 1948, it has been found

that the proper application of D.D.T. and Gammexane ("B.H.C.") is sufficient in itself to eradicate infestation of the wall structures without having recourse to the removal of woodwork for the purpose of disinfection. It will be appreciated that this procedure causes the minimum of upset in the house while achieving the same results. A feature of the work of the nurse-inspectresses is the early detection of infestation, thus preventing the vermin from establishing themselves.

The table submitted herewith shows the progress made during the past nineteen years in the prevention of bug infestation which has fallen from 10·7 per cent. in 1934 to 0·52 per cent. in 1953. It should be noted that serious infestation has fallen during that period from 7·1 per cent. to 0·2 per cent. throughout the rehousing schemes. This progress is further proof that the system which has been practised in Glasgow during the past nineteen years is thoroughly sound, as it depends for its success upon the cleanliness of tenants and the supervision of them by the nurse-inspectresses.

PROGRESS OF BUG INFESTATION PREVENTION IN REHOUSING SCHEMES.

Year	Number of Houses Inspected	Number of Houses in which Bed Bugs were found				Percentage of Total Number of Houses			
		Trace	M.I.	S.I.	Total	Trace	M.I.	S.I.	Total
1934	8,670	104	210	612	926	1·2	2·4	7·1	10·7
1935	10,576	218	368	378	964	2·1	3·5	3·6	9·2
1936	12,803	220	296	295	811	1·7	2·3	2·3	6·3
1937	13,676	253	165	304	722	1·8	1·2	2·2	5·2
1938	14,416	138	69	240	447	0·9	0·5	1·7	3·1
1939	14,609	79	62	168	309	0·5	0·4	1·2	2·1
1940	14,669	55	75	185	315	0·4	0·5	1·2	2·1
1941	14,731	51	65	94	210	0·3	0·4	0·7	1·4
1942	14,751	34	61	121	216	0·2	0·4	0·8	1·4
1943	14,769	25	31	120	196	0·2	0·3	0·8	1·3
1944	14,769	21	26	110	157	0·1	0·2	0·8	1·1
1945	14,769	31	21	108	160	0·2	0·1	0·7	1·0
1946	14,769	33	23	105	161	0·2	0·2	0·7	1·1
1947	14,769	30	21	131	182	0·2	0·1	0·9	1·2
1948	14,769	33	28	83	146	0·2	0·2	0·6	1·0
1949	14,769	27	41	89	157	0·2	0·3	0·6	1·1
1950	14,769	4	36	134	174	0·3	0·24	0·91	1·18
1951	14,769	27	20	30	77	0·2	0·1	0·2	0·5
1952	14,769	7	21	58	86	0·05	0·15	0·4	0·6
1953	14,925	3	46	24	73	0·82	0·3	0·2	0·52

Trace—Trace of bugs.

M.I.—Medium Infestation.

S.I.—Serious Infestation.

DISINFESTATION UNIT.

This year has been the busiest since the Unit was inaugurated in 1948, 6,318 apartments having been treated. This is an increase of 1,098 over the previous year. The following table shows the work carried out in each sanitary division :—

TABLE I.

Division			Number of Apartments treated for				Total Apartments Treated
			Bug Infestation	Tenants being Rehoused	Cockroach Infestation	Other Insects	
Eastern	....	....	721	304	102	213	1,340
Northern	....	....	597	664	83	71	1,415
South-Eastern	....	....	438	560	72	131	1,201
South-Western	....	....	692	231	82	132	1,137
Central	....	....	371	263	69	522	1,225
Total	....	....	2,819	2,022	408	1,069	6,318

Rehousing.—The number of apartments requiring treatment prior to the removal of the tenant's furniture to a Corporation house has increased, being 585 more than last year. With the increased building operations this aspect of the work should continue to enlarge for a number of years yet.

Other Insects.—Here also there has been an increase, particularly in the number of apartments treated for fly infestation—100 more than in 1952. During December the Unit was asked to advise on a plague of maggots in a tenement close in the Northern Division. These were identified as leatherjackets (larvae of the crane-fly) and were found in large numbers under the roots of long grass along the back wall of the property. A thorough soaking of the ground with a 5 per cent. D.D.T. water emulsion completely eradicated the nuisance. In the same month the Unit was called in to deal with a very heavy infestation of blue-bottles in a hide and skin merchants in the Eastern Division. This was successfully dealt with by the use of 5 per cent. D.D.T. water emulsion and 10 per cent. D.D.T. powder. These two infestations are specially mentioned because of the late time of year at which they took place and were probably due to the exceptionally mild winter.

The following table shows the amount of work carried out in each sanitary division of the City in respect of other insect infestations :—

TABLE II.

Division	Apartments treated for			Other Insects	Total
	Vermineous Bedding	Flea Infes- tation	Fly Infes- tation		
Eastern	73	58	54	28	213
Northern	13	38	5	15	71
South-Eastern	18	24	83	6	131
South-Western	34	42	41	15	132
Central	114	386	6	16	522
Total	252	548	189	80	1,069

Insect Identification.—For the identification of insects the services of the Unit were requested on 62 occasions. The specimens dealt with varied from ordinary bed-bugs, beetles, earwigs, etc., to tropical insects from the Port Health Department, Fruit Market and factories, which receive goods from overseas. Two infestations by small beetles in new Corporation houses were identified as due to members of the family Lathridiidae (fungi beetles). These beetles were feeding on moulds on the walls of cupboards where the plaster had not completely dried out.

Other Premises.—Outwith the work shown in the previous table 149 visits were paid to other premises at the request of the Division concerned. As a result of these visits 62 treatments were carried out in respect of cockroach, fly or ant infestations. These include 21 restaurants, 7 common lodging-houses, 4 food factories, 3 offensive trades, 2 hospitals and 25 other premises. This work is done at night or at a suitable time when there was no preparation of food in progress and also to avoid interfering with the primary work of the Unit, i.e., treatment of dwelling-houses. On two occasions the Western Regional Hospital Board requested the services of the Unit to deal with infestations in two hospitals, (1) an infestation of Pharaoh's Ant in the main kitchen and adjacent premises at Ruchill Hospital and (2) a heavy infestation of house-flies in all the wards of the Western District Hospital. Both these operations were successful.

The table below shows the number of visits made during the year for different types of infestation :—

TABLE III.

Bug Infestation and Rehousing	Cock- roach Infes- tation	Verminous Bedding	Flea Infes- tation	Fly Infes- tation	Other Insect Infes- tation	Total
5,189	952	179	158	150	127	6,755

Insecticides.—It is the opinion of the Unit that the insecticides D.D.T. (Dichloro-Diphenyl-Trichlorethane) and Gammexane (Benzene-hexachloride) used properly in both liquid and powder form are still the best chemicals for large scale disinfestations as undertaken by this Department. Experiments are at present being carried out with the new Insecticidal Resins but it is still too early to pass an opinion on the efficacy of these products.

SECTION IX.

BACTERIOLOGICAL LABORATORY.

Bacteriology has given us great powers of control over the pathogenic microbe and although the public health has been vastly improved because we have given attention to contributory causes of disease such as poverty, overcrowding, malnutrition, bad hygiene (at home and in the factory), occupational hazards, unclean food and similar factors, yet the public health laboratory still has a very important part to play in modern medicine. For it is not only concerned with epidemic infections—the maladies seen in fever hospitals—but with many other infections which may complicate disease or injury. Nor must it be forgotten that the field of work of an active public health laboratory takes in more than bacteriology. Frequent requests are made for tests and examinations helpful in clinical and preventive medicine which require excursions into the fields of haematology, parasitology, entomology, etc. In fact, the public health laboratory throws a wide net.

Bacteriological findings are of great importance in the understanding and interpretation of the facts of epidemiology, and in recent years the necessity for the specialist study of the bacteriology of individual microbes, particularly those groups which are the causative agents in outbreaks of food poisoning, enteric fever and other bowel infections, have resulted in the formation of reference laboratories.

However, reference laboratories—useful as they are—operate behind the lines and depend for their material on the day to day routine front-line work of the public health and bacteriological laboratory, of which the volume shows no signs of diminishing. On the contrary, the number of examinations and tests made in this laboratory for diagnostic, preventive, epidemiological, hygienic and general public health purposes has increased steadily of late years and established a new record in 1953. Besides a substantial increase in the number of excreta examined because of the prevalence of dysentery in the city, there has been an increase because of the rise in food-poisoning incidents. More specimens were examined also for the control of tuberculosis and, in relation to the hygiene of food-handling and distribution, more work was done than in previous years. More samples were received from consignments entering the Port. The bacteriological examination of food-stuffs as to their fitness for consumption or because of illness attributed to them involves extended work which occupies

more time and uses more material than an equivalent number of the more simple tests, used for instance, in diagnosis. More blood grouping was done. But all was not increase, for there was again a welcome fall in the number of specimens from suspected cases of diphtheria and venereal infection. There was also to be noted a further reduction in the work done for Stirlingshire, although still nearly five thousand examinations were made.

Any account of the work performed in a bacteriological laboratory necessarily emphasizes the technical procedure of the actual examination of specimens. There is a large background of laboratory practice which is concerned with the preparation of specimen containers; treatment of the specimen itself before examination; the preparation of media for the growth of micro-organisms, nowadays much more complicated and various than in years gone by; the cleansing and sterilisation of glass-ware, a large and continuous labour; the care of animals; the training of junior technicians; the maintenance of equipment and the extensive clerical work of reporting. The primary bacteriological work of this laboratory has more than doubled in the past ten years and the accessory labour has increased *pro rata*.

The services of the laboratory were in greater demand than ever in 1953. There was no contraction of the wide range of bacteriological investigations carried out, which covers early diagnosis of disease; investigation of contacts; tests for cure; examination of suspected food; the bacteriological control of the milk and water supplies; examinations required as helps in preventive medicine; sensitivity tests required for the newer chemotherapeutics including the use of antibiotics, and many others which give help to the M.O.H. and his officers, medical practitioners and medical officers of hospitals and clinics.

The number of examinations made in 1953 was 108,871 which is easily the highest attained since the laboratory was established. It is 4,426 above the figure for 1952, an increase of 4.2 per cent. Almost every month in the year showed an increase, but as happened in 1952, October provided the largest number at 11,390.

At the end of this report is a tabular summary of the work done.

INFECTIOUS DISEASES—EPIDEMIOLOGICAL INVESTIGATIONS.

Diphtheria.—During the year 4,487 swabs were examined for the presence of the diphtheria bacillus. This is 348 less than last year, and while not a great decrease, it does indicate the relative absence of diphtheria among the population. In 1948 the laboratory examined

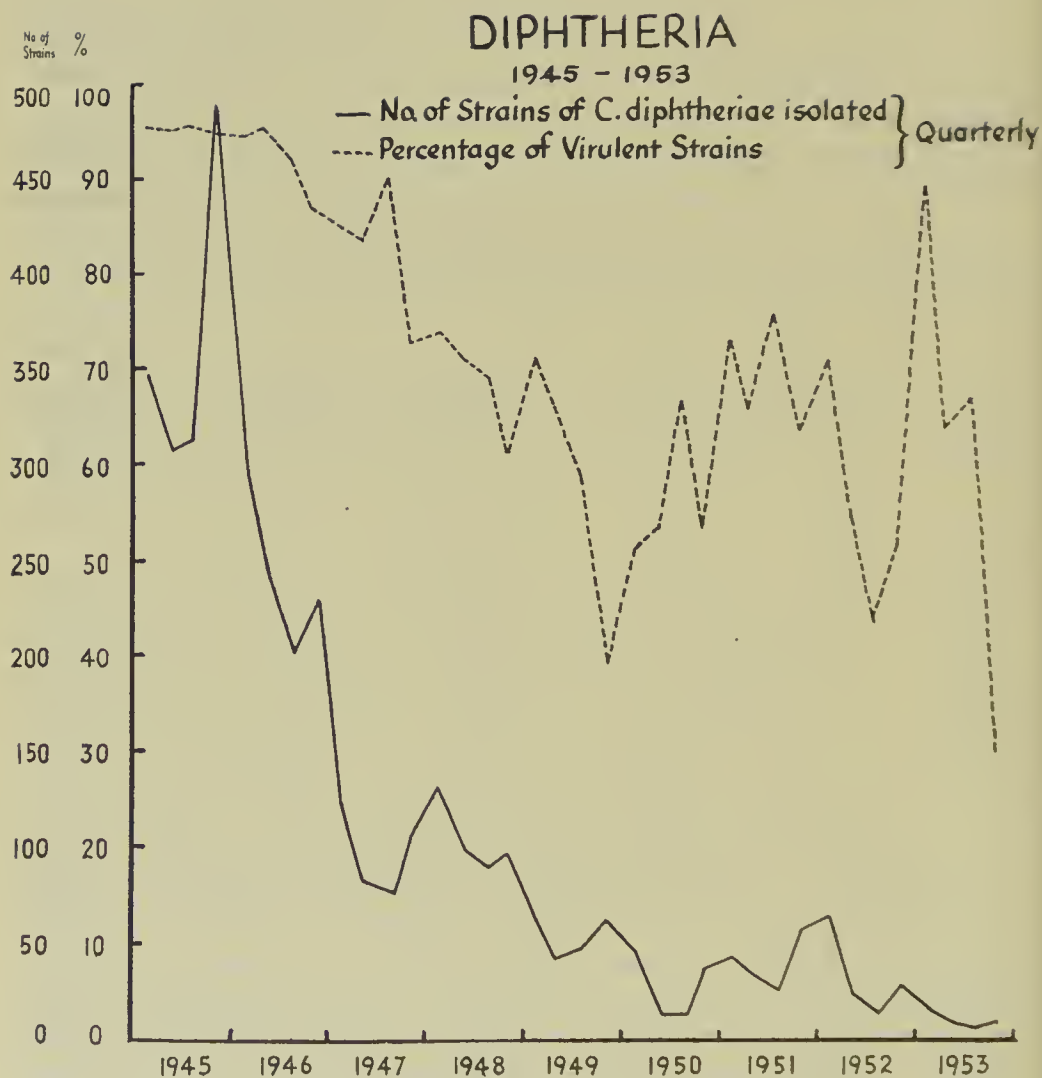
nearly 11,000 swabs. The decrease was wholly among suspected cases, the number of swabs examined for purposes of control being rather higher than in 1952. It is obvious that practitioners had less frequently to suspect diphtheria, a state of affairs mainly attributable to prophylactic immunisation which thus shows its value.

Of the number of swabs examined, 3,842 were from suspected cases and 645 were taken for control purposes. The number of positive specimens was only 66, a notable decrease on last year's figure of 136. Typing of all strains isolated was done as usual, and virulence tests when required. Toxigenicity tests were made on all strains. Biological tests for virulence numbered 45. The 66 cultures of *C. diphtheriae* isolated from new cases were classified as *gravis* 9, *intermedius* 11, *mitis* 33, and *atypical* 13. The following table has been extended to include the findings of 1953.

Year	Total No. of Strains		Gravis No. Per cent.		Intermedius No. Per cent.		Mitis No. Per cent.		Atypical No. Per cent.	
1948	...	397	122	30.7	54	13.6	142	35.7	79	19.8
1949	...	220	46	20.9	41	18.6	86	39.1	47	21.4
1950	...	118	40	33.9	12	10.2	32	27.1	34	28.8
1951	...	165	88	53.3	14	8.5	21	12.7	42	25.4
1952	...	136	60	44.1	20	14.7	19	14.0	37	27.2
1953	...	66	9	13.6	11	16.6	33	50.0	13	19.7

The progressive decline in the number of strains isolated which was obvious up to 1950 and which was abolished by increases in the two following years is now again apparent in a large fall. The proportion of the two most dangerous types *gravis* and *intermedius* was only 30.2 against 58.8 per cent. last year. Of the *mitis* and *atypical* strains 18 were proved to be non-virulent and non-toxigenic, which leaves only 48 virulent strains in all, against 82 in 1952. And of these only 9 or 18.7 per cent. were of the potentially epidemic *gravis* type. These figures show a great improvement in those of previous years. All the *gravis* strains proved to be toxigenic by laboratory tests. For the year under review the *mitis* strain of *C. diphtheriae* has to a large extent replaced the usually more dangerous types.

The following table which was printed last year is extended to include 1953. It shows the increased fall in the case rate and no case fatality rate since no one died of diphtheria in Glasgow in 1953.



CASES OF DIPHTHERIA PER 100,000 OF POPULATION
AND DEATHS PER 1,000 CASES.

				Case rate per 100,000	Case fatality rate per 1,000 cases.
1943	...	...	...	279	28
1944	...	...	...	226	26
1945	...	...	...	187	17
1946	...	...	...	135	25
1947	...	...	...	45.6	25.8
1948	...	...	...	25.8	28
1949	...	...	...	13.9	33
1950	...	...	...	7.8	—
1951	...	...	...	11.1	31
1952	...	...	...	7.3	80
1953	...	...	...	4.4	—

All the types of strains of *C. diphtheriae* summarised above may be virulent. *Gravis* and *intermedius* are almost always virulent. Some *mitis* strains are not virulent and most of the *atypical* strains now being isolated are not virulent (though there is an *atypical* strain which is virulent, but it has not been isolated in Glasgow since 1949). The graph shown nearby displays the percentage of virulent strains isolated quarterly among the total quarterly numbers of all types found in the years 1945 to 1953. In the whole year 1945 over 1,300 strains were isolated and about 95 per cent. were virulent. As the numbers of cases of diphtheria fell rapidly in 1946 and 1947, due to the cumulative effect of immunisation, the number of strains isolated fell, and the percentage of virulent strains fell also though not as heavily as the fall in cases.

The percentage of virulent strains continued to fall until 1949 when, although the number of cases of diphtheria continued to fall with small interruptions, the percentage of virulent strains isolated climbed again and has oscillated a good deal during the period 1949 to 1953. The number of strains of *C. diphtheria* isolated in 1953 was 66 as already stated. It seems to be that when diphtheria is prevalent the percentage of virulent strains is high, but when the disease is scarce and the numbers few an increasing proportion of non-virulent strains is found. It has also been suggested that a high proportion of atypical strains (mostly non-virulent) are found when a change of the predominant type in the district is occurring. *Mitis* was predominant in Glasgow in 1953, virulent *mitis* strains forming 58.3 per cent. of all virulent strains isolated. Infections with *mitis* strains have usually a smaller case fatality rate than either of the other types and (although the numbers under examination are now very small) the *mitis* variety has not been in the ascendant in Glasgow for many years.

Streptococcal Infections.—Haemolytic streptococci are among the commonest and most virulent of micro-organisms. They produce several toxins and their attack can produce, variously, scarlet fever, erysipelas, puerperal sepsis, acute sore throat, and complicate injuries due to burns, and wounds due to other accidents. Carriers of haemolytic streptococci in their noses or throats can be a danger to susceptible people, sick or well. It is therefore of great importance that the presence of these cocci where they can do harm should be detected early.

The number of swabs, mostly from noses and throats, but including some from puerperal women, examined in 1953 for haemolytic streptococci was 1,649 against 1,316 last year. Positive findings numbered 389. Other material from various lesions yielded non-haemolytic varieties of streptococci including *Strept. viridans* and enterococci, which now and then are the cause of disease.

Staphylococcal Infections.—The pathogenic staphylococci are a common cause of furuncles, boils, carbuncles, abscesses and other septic states. They produce toxins, some haemolytic, some capable of causing necrosis and some which can cause symptoms of food-poisoning. Staphylococci are widely distributed in nature and only a proportion of them are pathogenic.

The so-named *Staphylococcus aureus* is the most virulent variety. This microbe was found 214 times in material from various sources sent for examination.

Vincent's Infections.—These are fairly common infections of the throat presenting an appearance sometimes mistaken for Diphtheria. They are due to a spirillar organism known as *Borellia* (or *Treponema*) Vincenti. During the year 207 swabs were examined and Vincent's organisms found 22 times.

Sensitivity Tests.—Requests to examine the sensitivity of various bacteria to the anti-biotics have been more frequent. Of these tests 757 were done in the laboratory compared with 571 last year. The anti-biotics used were penicillin, streptomycin, chloramphenicol, aureomycin and terramycin.

Enteric Fevers.—Excreta from 580 suspects were examined, and 18 of them yielded typhoid or paratyphoid bacilli, but in samples from contacts and in those sent in for purposes of control, 332 in all, these organisms were present 45 times. The total number of specimens examined was 269 less than last year, and there were fewer giving positive results.

Salm. typhi was isolated 9 times from 2 patients and *Salm. paratyphi-B* 54 times from 16 patients. There was little of either infection in the city according to the laboratory findings.

From workmen employed around waterworks, 37 samples of excreta were examined for the purpose of detecting any unwitting carrier of enteric organisms whereby the water supply might accidentally be polluted. Blood from most of these persons was also examined serologically. All tests, bacteriological or serological, proved negative.

The paratyphoid strains isolated belonged to various Viphage groups. Type I, Type IIIa, Type "Taunton" and Type "Beccles." Two of them proved to be untypable. Typing of varieties of enteric bacilli in this way enables associated cases to be traced and grouped, which assists epidemiological investigation and recording.

Both typhoid and paratyphoid bacilli were isolated from a few specimens sent from places in Stirlingshire. Most of them were from known carriers. One patient yielded *S. typhi* and eight *Salm. paratyphi-B*.

Dysentery.—The prevalence of bacillary dysentery in the city has continued to increase. Dysentery bacilli were isolated from 1,966 patients which is 173 more than last year and is practically equal to the standing record of 1,970 for 1950. The chief offending organism is *Shigella sonnei* which is responsible for most of the cases. The disease due to this microbe is very mild and has a very small mortality at present. There must be many more infections in the community than are detected, symptomless carriers, and people who have the slightest disturbance for which they naturally do not seek advice.

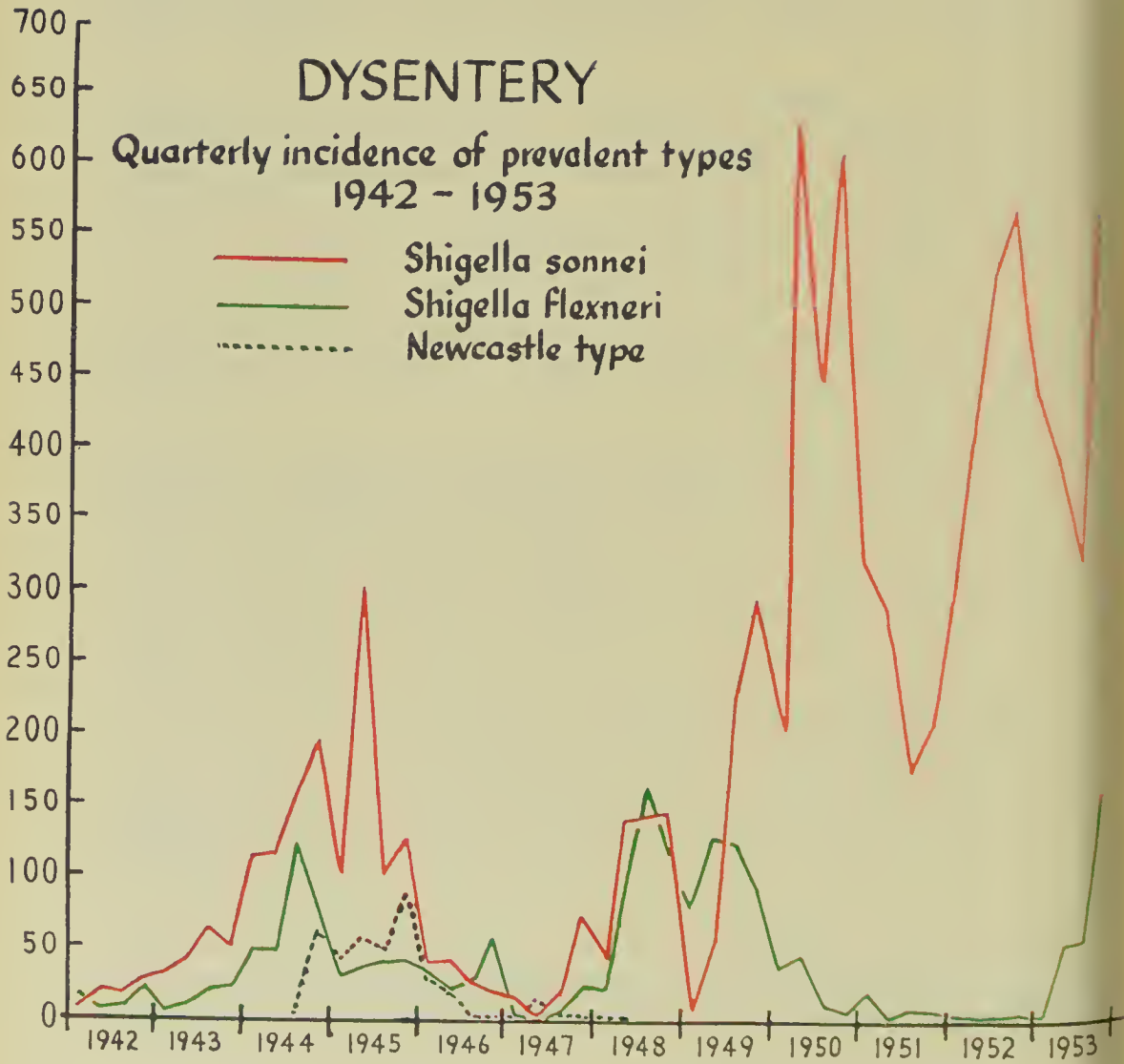
In addition to the increase in Sonne dysentery, the Flexner type has lately appeared with increasing frequency after almost disappearing for over a year. Infections with *Shigella flexneri* usually give rise to more urgent symptoms than infections with the *Sonne* bacillus, but again on the whole the illness caused is relatively mild. Although there is a good deal of dysentery in Glasgow, and indeed in Britain as a whole, it is a mild disorder everywhere and much different from the dysentery seen even fifteen years ago.

Shigella sonnei was isolated from 1,694 patients against 1,779 in 1952, but the leeway was made up by *Sh. flexneri* which was identified in 272 patients compared with only 11 in 1952. Altogether 10,538 specimens were examined from suspected cases of illness and 12,784 more for the purposes of control. From the latter, dysentery bacilli were isolated 2,127 times.

DYSENTERY

Quarterly incidence of prevalent types
1942 - 1953

- *Shigella sonnei*
- *Shigella flexneri*
- - - Newcastle type



This table shows the laboratory isolations of dysentery bacilli since 1946.

Year	Sonne	Flexner	Newcastle	Schmitz	Total.
1946 ...	111	109	49	—	269
1947 ...	66	18	21	—	105
1948 ...	434	383	3	—	820
1949 ...	501	373	1	1	826
1950 ...	1,865	105	—	—	1,970
1951 ...	949	40	—	—	989
1952 ...	1,779	11	3	—	1,793
1953 ...	1,694	272	—	—	1,966

None of the more exotic dysentery bacilli, Shiga, Schmitz, Newcastle, etc., have been seen for some years with the exception of 3 Newcastle infections in 1952. The graph here interpolated shows the quarterly incidence of the prevailing types of dysentery bacilli during the years 1942-1953 inclusive. It is almost self-explanatory, but to be noticed are recurrent waves of increase of both the dominant types, Sonne and Flexner, with peaks in 1944 and 1945, again in 1948 and 1949 and further in 1952 and 1953. The small outbreak of Newcastle dysentery which occurred in 1944 and 1945 at the end of the late war is indicated. This small quasi-epidemic within an endemic did not become endemic with the rise in prevalence of other forms of dysentery in 1948.

Dysentery (amoebic).—Ninety-two specimens of faeces were examined for *Entamoeba histolytica*, all with negative results. Many of these were from ex-service men and women who had been abroad.

Giardia intestinalis, an intestinal flagellate, not uncommon in the human intestinal tract and sometimes thought to be associated with diarrhoea was occasionally found. It is of small importance, but the laboratory is asked to search for it from time to time.

Food-poisoning and Foodstuffs.—Transient illness, gastrointestinal in type, thought to be attributable to food-poisoning, has attracted somewhat increased attention this year, and the number of specimens of excreta from persons rose to 6,223 compared with 4,116 in 1952 (these figures include repeat samples for control and to test for cure). There were 42 specimens of suspected foods investigated in connection with illness as against 90 last year. These foods included the usual prepared meat dishes, tinned meats, corned mutton, sausage, soup powder, jellied veal, chicken, dried egg, dehydrated milk, fruit pies, tinned peas, etc. In none of these foods collected because of alleged connection with gastric upset were members of the *Salmonella* food-poisoning group found. There is always doubt as to the exact article of food responsible for these incidents and often the whole of a dish has been consumed and none is available for examination. But some of the samples of food received were badly contaminated, having very

high microbic contents (one of 1,800 millions per gramme) and containing faecal *B. coli*, faecal streptococci, *proteus*, *Cl. welchii* and other organisms. The ingestion of these dirty foods might very well upset susceptible people. From 9 samples, including cooked beef, sausage, dried milk and boiled chicken, *staphylococcus aureus* was isolated. The toxins of this organism can cause sharp transient illness of gastro-intestinal type. Most of the samples of food received related to single cases of illness or to small family outbreaks. There were one or two larger outbreaks, one in a hospital involving nurses and due to *Salm. typhi-murium*, and one among guests at a wedding party at a city catering establishment due to *Salm. thompson*. There were about 30 clinical cases among these latter. Carriers among food handlers were probably the cause of both outbreaks.

From the 6,223 specimens of excreta received, members of the Salmonella group were isolated 838 times including repeats for control and tests for clearance. In all, 247 of these were primary isolations against 160 in 1952 and 174 in 1951. The increase was practically entirely due to an increased number of infections with *Salm. typhi-murium*. The subjoined table has been amended to include the findings in 1953.

			1953	1952	1951	1950	1949	1948
<i>S. typhi-murium</i> ...	...	...	209	139	97	80	73	16
<i>S. enteritidis</i> ...	...	...	13	7	53	12	—	4
<i>S. newport</i> ...	...	...	—	2	9	—	1	2
<i>S. thompson</i> ...	...	...	3	6	4	5	1	—
<i>S. potsdam</i> ...	...	...	—	—	4	—	—	—
<i>S. saint-paul</i> ...	...	...	—	—	2	—	—	—
<i>S. montevideo</i> ...	...	...	—	—	1	—	1	1
<i>S. bovis morbificans</i> ...	...	...	—	1	1	—	1	—
<i>S. georgio</i> ...	...	...	—	—	1	—	—	—
<i>S. oregon</i> ...	...	...	1	—	1	—	—	—
<i>S. minnesota</i> ...	...	...	—	1	1	—	—	—
<i>S. newington</i> ...	...	...	—	—	—	1	—	—
<i>S. san-diego</i> ...	...	...	—	—	—	1	—	—
<i>S. seftenberg</i> ...	...	...	—	—	—	1	—	—
<i>S. bredeney</i> ...	...	...	—	1	—	—	—	—
<i>S. stanleyville</i> ...	...	...	—	1	—	—	—	—
<i>S. vireschow</i> ...	...	...	—	1	—	—	—	—
<i>S. anatum</i> ...	...	...	1	—	—	—	—	—
<i>S. stanley</i> ...	...	...	17	—	—	—	—	—
<i>S. cholerae suis</i> (var <i>Kunzendorf</i>) ...	...	...	—	1	—	—	—	—
<i>S. (unidentifiable)</i> ...	...	...	2	—	—	—	—	—
<i>S. (new salmonella</i> <i>unnamed</i>) ...	...	...	1	—	—	—	—	—
			247	160	174	100	77	23

There is a considerable increase in the number of strains of *Salm. typhi-murium* isolated. It is the commonest food-poisoning organism of the Salmonella group with a wide distribution in man and animals. *Salm. stanley* is new in this region (there were a few infections outside Glasgow). Most of the Glasgow cases had some connection with the personnel of a fish restaurant. *Salm. anatum* has not been isolated in this laboratory before. It is found in man and animals and is said to be often associated with *Salm. typhi-murium*. The two strains labelled "unidentifiable" were undoubtedly Salmonellae but they could not be brought into the phase necessary for complete identification even by the Salmonella Reference Laboratory. The new Salmonella recorded had been isolated, the writer understands, only once before, in West Africa. It is not yet named.

In addition to the Salmonellae found in Glasgow and listed above, *S. typhi-murium*, *S. enteritidis*, *S. derby*, *S. newport*, *S. stanley*, *S. thompson* and *S. worthington* were isolated from specimens received from patients in Stirlingshire. There were 12 primary isolations from the County, 5 of them being *S. typhi-murium*.

Besides the food samples examined in connection with cases of illness many were tested for bacterial contamination with reference to their fitness for consumption as a measure in promoting hygienic food-handling and distribution. There were 178 of these, most of them synthetic cream for use in cakes, buns, trifle, etc. The tests were made on final products and on material in course of preparation and on original ingredients. In some cases high bacterial counts and contaminations with coliforms and faecal *B. coli* were found but frank pathogens were never isolated. In the interests of cleanliness in production, 44 swabs and rinses from machinery used in the milk trade were also examined in order to trace sources of bacterial contamination which could prevent the ready attainment of the standards required in designated milk. Such tests are often valuable in detecting faulty manipulative processes of dirty utensils and apparatus.

Shellfish.—Shellfish examined this year consisted of 10 samples of uncooked mussels, one sample of oysters and one each of cooked and uncooked whelks. Some were examined individually and in all 61 shellfish from these batches were tested. There was no evidence of gross pollution and no pathogenic organisms were isolated. Mussels, whelks and winkles are better cooked before being eaten. One sample of mussels was alleged to have caused gastric upset in a family, but when 12 were examined, no noxious microbe was isolated, and moreover, none was found in the excreta of the persons complaining.

Venereal Diseases.—During the year a total of 27,927 tests were made on 24,883 specimens of which 25,143 were examinations for syphilis and 2,784 for gonococcal infection. These figures show a reduction of 1,818 on last year (syphilis 1,570, gonorrhoea 248).

The tests for syphilitic infection used were the Wassermann, Kahn and Laughlen reactions, the last being a screening test used to eliminate quickly serological negative specimens. Any sample showing the slightest deviation from the normal under the Laughlen precipitation test is re-examined by the Wassermann or Kahn tests or by both. Of the 11,533 Wassermann tests done, 8,273 were for diagnosis, 2,937 were made to test progress in treated cases and 323 were to confirm anomalous findings in the Laughlen screening procedure. To supplement the Wassermann test, 2,721 were examined by Kahn's process. The Laughlen test was used to exclude suspicion of syphilis 8,457 times in antenatal cases as a routine, and 2,432 times in presumed non-syphilitic disease on samples of blood from V.D. clinic patients for the same reason. In addition, to provide supplementary information, 129 samples of cerebro-spinal fluid were examined by Lange's Colloidal Gold test, and in 102 the total protein content of the fluid was determined. These last two tests are useful in suspected syphilis of the nervous system, for diagnostic purposes and to examine progress under treatment.

Only 3 films of exudate were sent for microscopic examination for the *Treponema pallidum*.

For outside authorities, 1,745 tests were made, 825 less than in 1952. This total comprised 1,010 Wassermann, 567 Kahn, 28 Lange's tests and 5 total protein estimations, all for the detection and control of syphilis. Also 135 examinations were made in relation to suspected gonococcal infections.

Tests for gonococcal infections include culture, microscopical examination of films of urethral and other exudates, and also the complement fixation test.

Swabs for culture of *N. gonorrhoeae* are sent to the laboratory in a special transport medium which protects the delicate micro-organism during transit. Cultures are made from the swabs which are removed from the surrounding semi-solid protective gel on arrival. The service is mainly used by the City V.D. clinics for women, but specimens are also received not infrequently from the clinics for men. Cultures are sometimes made at the request of general practitioners. The number of specimens examined by culture this year was 1973 from 638 persons. From these the gonococcus was isolated 200 times from 149 patients.

Smear preparations examined numbered 605 of which 48 were reported positive, and 296 samples of blood were examined by the gonococcal complement fixation test, yielding 15 positives.

From Stirlingshire, 89 blood samples for the G.C.F.T. gave 16 positives and 40 specimens from 16 patients examined by cultural methods yielded 3 positives from 2 patients.

Trichomoniasis—*T. vaginalis* does not cause a major disease, but sometimes the inflammation and irritation due to its presence requires prolonged treatment. Of 1,992 specimens examined for *Trichomonas vaginalis*, 309 (15.5 per cent.) were found positive. There were also 40 specimens examined for the Stirlingshire authority. *Trichomonas* was found in 2 of them.

Ophthalmia neonatorum.—During the year 365 samples of exudate from the eyes of 179 children were examined for gonococci, 21 of them by cultural methods from 13 babies. Among these were found only 5 babies with gonococcal ophthalmia from whom, for diagnosis and clearance, 26 films and cultures were examined. The meningococcus was isolated from the conjunctival exudate of one boy. A few of the inflammatory conditions were due to *Staph. aureus*. The Koch-Weeks bacillus was found occasionally.

PUBLIC HEALTH—GENERAL CONTROL.

Antenatal—Rh tests and Blood Groupings.—The practice for several years has been continued of examining all samples of blood sent from pregnant women for the presence of the Rh factor. It is also sometimes helpful to have the Rh factor classified in babies and adult males. At the same time the primary blood groups (A.B.O. groups) of these patients are usually determined. From general practitioners in the city 896 samples of blood were received, an increase of 248 on last year. The remainder came chiefly from the antenatal clinics. Tests for the Rh factor numbered 9,564 which is 36 fewer than in 1952. Of these, 1,663 proved to be Rh negative (17.4 per cent.). Blood grouping was done on 8,800 samples. Further investigation of all the Rh negative bloods by the Blood Transfusion Service showed that 39 of the persons yielding these results were sensitized to the Rh factor, including 8 women already found to be sensitized in previous pregnancies.

Tuberculosis.—The number of samples of sputum examined microscopically for *M. tuberculosis* was higher than last year by 1,234. The total was 10,826 and in 1,977 *M. tuberculosis* was found. The figures include primary cases and those examined during treatment.

Samples of urine, sputum, cerebro-spinal fluid, pus and other morbid materials were investigated microscopically and by biological test and culture. Microscopical examinations numbered 419, tests by culture 109 and biological investigations 224, all of which totals are larger than those of 1952.

Milk Supply. Tuberculosis.—The total number of samples of milk tested biologically for tubercle was 328. For the City of Glasgow were examined 128 designated milks, 8 undesignated, 43 samples of milk supplied to schools and 28 supplied to hospitals. In addition to these there were 51 from Clydebank and 71 from Stirlingshire examined.

None of the milks examined was found to be infected by *M. tuberculosis*.

There were also 11 samples of cream submitted to biological examination for *M. tuberculosis*, all with negative results.

Milk Supply. Bacterial Content.—To provide information useful in the control of the milk supply routine examination of samples of milk to determine the bacterial content is carried out. This year 2,030 samples were so tested against 1,909 last year. The investigations are made to ensure compliance with the regulations governing the sale of designated milk or with the requirements of the department regarding milk produced in the city or brought into the city for processing.

Of the samples examined, 1,867 (92 per cent.) were satisfactory. This is a rather larger percentage than in 1952.

The general good quality of the milk is quite maintained. More details of the results of bacteriological examinations are set forth in this table :—

		Number of Samples	No. complying with Standards	Per cent. complying	
				in 1953	in 1952
<i>Hospital Supplies—</i>					
Raw (Certified ; T.T.) ...	...	163	137	84.0	87.8
T.T. (Past.) ; Pasteurised	...	123	108	87.8	85.1
<i>Public Supplies—</i>					
Raw (Certified ; T.T.) ...	...	495	429	86.7	80.2
T.T. (Past.) ; Pasteurised	...	951	910	95.7	96.1
<i>School Supplies—</i>					
Pasteurised	... , ...	160	153	95.6	96.4
<i>Undesignated milk produced or pro-</i>					
<i>cessed in city</i> ...	...	92	90	97.8	97.3
<i>Miscellaneous Milks</i> ...	...	46	40	87.0	87.5

Milk Bottles.—The importance of providing clean containers for milk and other beverages is reflected in the regular examination of washed bottles. This year 236 washed milk bottles were examined and 182 (77·1 per cent.) were satisfactory.

Other bottles destined to hold beer, aerated waters and other drinks were also examined. Of 32 examined, only 18 (56 per cent.) satisfied the department standard.

Ice Cream.—There was an improvement bacteriologically in the quality of the ice-cream submitted for examination. The following table gives a classification of the results obtained on the 143 samples.

Bacterial count per ml.					No. of Samples	Percentage 1953	Percentage 1952
0—	30,000	...	...	...	119	83·2	77·3
30,000—	100,000	...	...	...	12	8·4	10·7
100,000—	200,000	...	...	...	3	2·1	2·2
200,000—	1,000,000	...	...	...	2	1·4	5·3
Over a million	...	...	...	...	7	4·9	4·4

The number of samples of ice-cream complying with the high standard of certified milk is higher this year at 83·2 per cent.

Coliform bacilli were found in 1/100 ml. in 17 (11·9 per cent.) of the samples. The corresponding percentage last year was 14·2.

Synthetic Cream.—The examination of synthetic cream so largely used nowadays in confectionery was continued. Three times as many specimens were sent to the laboratory in 1953 as in the previous year. Results of examinations of 158 samples are tabulated here. The 1952 figures are not comparable as sampling was confined to the autumn and winter of that year.

Bacterial count per gram of product					No. of samples	Percentage 1953
0—	30,000	...	...	...	93	58·9
30,000—	100,000	...	...	...	23	14·6
100,000—	200,000	...	...	...	5	3·2
200,000—	1,000,000	...	...	...	12	7·6
Over a million	...	...	...	...	25	15·8

Coliform organisms were found in 1/100 ml. in 26 (16·5 per cent.) of the samples.

The over-all results indicate that the work should be pursued in the interests of the hygienic control of this substance.

Miscellaneous Samples.—Swabs and rinses from farm equipment were examined in investigating the source of contamination of samples of designated milk.

City Water Supply.—Six hundred and ninety-one samples of water from reservoirs, mains and other sources were routinely examined for bacterial content including the particular micro-organisms which indicate contamination. The high standard of the water supply was found to be maintained. The following table shows details of the results obtained from the main supplies.

Supply	No. of Samples	Average bacterial count per ml. at 37°C.	Average bacterial count per ml. at 22°C.	B. coli		
				Present in 100 ml. Absent from 50ml.	Present in 50 ml. Absent from 10ml.	Present: 10 ml. Absent from 5ml.
Loch Katrine	208	2	36	0	1	0
Gorbals ...	48	22	22	4	0	1

Swimming Baths Water.—The majority of the bacteria added to swimming bath water by bathers are non-pathogenic, but a few are known causes of disease. Hence it is desirable to have bacteriological control of the waters to eliminate as far as possible harmful bacterial pollution. There were examined during the year 244 samples from public baths, 46 from school swimming ponds and 4 from baths belonging to an outside authority. Of the 290 city samples, 244 (215 from public baths and 29 from school baths) gave bacterial counts of less than 10 per ml.

Anthrax.—From consignments entering the Port, 28 samples of dry-salted goat-skins and 2 samples of dried zebra hide were examined culturally and biologically for *B. anthracis*. The Anthrax bacillus was recovered from 13 samples of the goat-skins.

Plague.—The examination of rats collected around the Port from ships and dock-side warehouses was regularly done. No sign of infection suggesting plague was seen in the 318 rats examined.

Foodstuffs.—Several consignments of food entering the Port during the year were sampled for bacteriological examination for various reasons: canned produce showing blown tins, rat contaminated sugar, a sample of liquid egg, fats—beef stearine, edible tallow and other foods which might be unfit for consumption. Fifty samples of various sorts were handled. Some high bacterial counts were recorded and faecal contamination was noted in a few instances. From the liquid egg *Salm. typhi-murium* was isolated. No frank pathogens were found in any of the other samples.

Yellow Fever.—There was more prophylactic vaccination against yellow fever done last year on people travelling to areas at risk. There was also more demand for the protection of ships' companies. The laboratory issued 3,735 doses of yellow fever vaccine.

Insect Pests.—A few were brought for identification during the year. They included among others, bugs (*Cimex lectularius*); the Golden Spider Beetle (*Niptus hololeucus*); the Silverfish (*Lepisma saccharina*); one or two flies—a mosquito and a window gnat; the furniture beetle (*Anobium domesticum*) and mites.

ORIGINAL INVESTIGATIONS.

Dysentery.—The work mentioned in last year's report conducted in collaboration with Ruchill Hospital was completed. Over 100 children with dysentery were studied and the excreta examined bacteriologically every day during a standard routine treatment. It was found that only about 50 per cent. were clear of infection by the 6th day and about 80 per cent. by the 11th day. The implications of the findings are being studied. More than 2,000 specimens were examined in the laboratory for this investigation.

Diphtheria.—Epidemiological records of Diphtheria are constantly being scrutinised and brought up to date, and the bacteriological vagaries of *C. diphtheriae* continually pursued in further extension of the twenty years study of the subject already completed.

Food Poisoning.—A study of some of the micro-organisms causing gastro-intestinal upset is in progress.

PUBLICATIONS.

Eccentrics in Medicine. H. S. Carter (1953). Glas. Med. J. XXXIV 259.

Medical Gleanings from the Diary of John Evelyn. H. S. Carter (1953). Glas. Med. J. XXXIV 463.

HARTLEY S. CARTER,
Bacteriologist.

TOTAL OF EXAMINATIONS FOR YEAR 1953.

CITY OF GLASGOW. INFECTIOUS DISEASES.

<i>Diphtheria and General Throat Infections—</i>						<i>Positive</i>	<i>Total</i>
Diphtheria	...	...	Suspects	...	...	58	3,842
			Control, etc.	...	...	66	645
			Typing	...	...	—	138
			Virulence Tests (biological)			—	45
			Toxigenicity Tests	...		—	68
Streptococcal Infections	...	...	Suspects	...	...	389	1,649
Vincent's Infections			Suspects	...	...	22	207
Staphylococcal Infections	...	...	...	...	...	—	214

Gastro-intestinal Infections—

Enteric Fever	...	...	Suspects	...	...	18	580
(Typhoid, paratyphoid)	...	...	Control, etc.	...	...	45	332
			Waterworks employees	...	...	—	37
Food Poisoning	...	...	Suspects and control	...	...	838	6,223
(Salmonellosis)	...	...	Foodstuffs	...	...	—	41
Dysentery : Bacillary			Suspects	...	...	1,966	10,538
			Control	...	...	2,127	12,784
Amoebic	...	...	...	...	...	—	92
Other forms—giardia, etc.	...	...	...	...	...	—	4

Tuberculosis—

Sputa	...	...	...	1,977	10,826
Various specimens (micros. exams.)	...	...	...	—	419
Various specimens (biological exams.)	...	...	...	—	224
Various specimens (culture)	...	...	...	—	109

Venereal Diseases—

Syphilis	...	...	Wassermann Test	...	—	11,533
			Kahn Test	...	...	2,721
			Laughlen Test	...	...	10,889
			Lange's Colloidal Gold Test	...	...	129
			Protein estimations	...	...	102
Gonorrhoea	...	...	Smears, cultures and complement fixation tests	...	...	2,874
			Ophthalmia neonatorum (smears and cultures)	...	26	365

Carry forward 77,666

TOTAL OF EXAMINATIONS FOR YEAR 1953—Continued

TOTAL OF EXAMINATIONS FOR YEAR 1935								Total
								77,666
OTHER EXAMINATIONS—								
Blood—Rh factor	...	...	...	...	...	...	...	9,564
Blood—A.B.O. grouping	...	...	...	...	...	...	...	8,800
Blood—various infections	...	...	...	...	...	...	...	140
Body fluids (urine, etc.)	...	...	...	...	...	...	...	371
Exudates	...	...	...	...	...	...	...	409
Faeces for worms	...	...	...	...	...	...	...	42
Faeces for occult blood	...	...	...	...	...	...	...	34
Swabs for Trichomonas	...	...	...	...	...	...	...	1,999
Insects (identification)	...	...	...	...	...	...	...	10
Antibiotic sensitivity tests	...	...	...	...	...	...	...	757
Miscellaneous	...	...	...	...	...	...	...	10
GENERAL PUBLIC HEALTH—								
City Milk Supplies (bacterial counts)	...	...	...	...	...	...	...	1,744
Hospital Milk Supplies (bacterial counts)	...	...	...	...	...	...	...	286
Milk (biological tests)	...	...	...	...	...	...	...	206
Cream (biological tests)	...	...	...	...	...	...	...	11
Milk bottles (biological tests)	...	...	...	...	...	...	...	36
Milk bottles (bacterial counts)	...	...	...	...	...	...	...	236
Swabs and rinses from milk processing machinery, etc.	...	...	...	...	...	...	...	44
Ice Cream	...	...	...	...	...	...	...	143
Foodstuffs—fitness for consumption :—								
Synthetic cream, etc.	...	...	...	...	...	...	...	178
Shellfish—mussels, cockles, whelks	...	...	...	...	...	...	...	61
Beer and mineral water bottles	...	...	...	...	...	...	...	32
Water supplies—routine	...	...	...	...	...	...	...	692
Water from swimming ponds	...	...	...	...	...	...	...	290
PORT HEALTH AUTHORITY—								
Anthrax (hides and skins)	...	...	...	...	...	...	...	30
Plague (examination of rats)	...	...	...	...	...	...	...	318
Foodstuffs—fitness for consumption	...	...	...	...	...	...	...	50
OUTSIDE AUTHORITIES—								
<i>Stirlingshire—</i>								
Tuberculosis (sputum, etc.—micros.)	...	...	...	...	...	...	...	753
Tuberculosis (various specimens—biological)	...	...	...	...	...	...	...	110
Tuberculosis (various specimens—culture)	...	...	...	...	...	...	...	4
Tuberculosis (milk—biological examinations)	...	...	...	...	...	...	...	51
Gastro-intestinal infections	...	...	...	...	...	...	...	1,671
Throat infections	...	...	...	...	...	...	...	149
Veneral Diseases	...	...	...	...	...	...	...	1,784
Other infections	...	...	...	...	...	...	...	13
Sensitivity tests	...	...	...	...	...	...	...	10
								4,545
<i>Clackmannanshire—</i>								
Tuberculosis (sputum, etc.—micros.)	...	...	...	...	...	...	...	125
Gastro-intestinal infections	...	...	...	...	...	...	...	1
Throat infections	...	...	...	...	...	...	...	2
Veneral Diseases	...	...	...	...	...	...	...	1
Other infections	...	...	...	...	...	...	...	2
Sensitivity Tests	...	...	...	...	...	...	...	4
								135
<i>Clydebank—</i>								
Milk (biological test for tuberculosis)	...	...	...	...	...	...	...	71
Water from swimming ponds	...	...	...	...	...	...	...	4
								75
								108,871

SECTION X.

FOOD POISONING.

The number of cases of food poisoning which came to the notice of the Public Health Department during the year showed a very considerable increase, 456 being reported as compared with 144 in the previous year. In 1952 the incidence was made up entirely of sporadic cases and small outbreaks confined to single households. In 1953 there were six outbreaks of some magnitude affecting institutions and other places of communal feeding, the number of persons involved being 221.

The remaining 235 cases constitute the sporadic incidence and small outbreaks of the family type. The known sporadic incidence may be expected to increase with the growing awareness among the general public and medical profession of the nature of the group of diseases classified as food poisoning. Only a proportion and possibly a minority of the sporadic cases is included in these figures. Many, but not all, of the "unnotified" cases are trivial as regards the illness of the patient. The incidence, therefore, is only roughly comparable from year to year, but it is reasonable to state broadly that food poisoning was more prevalent in the city in 1953 than in 1952. The high incidence in institutions, particularly hospitals, is a serious feature of this increased prevalence.

There was no death from food poisoning in Glasgow during the year.

The seasonal trend conformed to the usual pattern of bowel infections spread by hand, such as dysentery and poliomyelitis. There is a building up of prevalence during the summer months as shown by dividing the 456 cases according to their month of onset—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	2	2	4	12	38	100	160	65	18	17	13

The management of food poisoning requires where possible an aetiological diagnosis, and it is proposed to arrange further discussion of food poisoning on this basis. Anatomical diagnosis such as gastritis, enteritis and gastro-enteritis (except in infants) are incomplete and no longer acceptable in dealing with this group of diseases.

Salmonella typhi-murium infections totalled 220, close on a half of all cases of food poisoning. This infection takes its place alongside *sonne* and *flexner* dysentery in its widespread occurrence throughout

the city. Resembling the dysenteries in its methods of spread, it gives some index of the standard of food hygiene in the homes and elsewhere in Glasgow. Three of the larger outbreaks belonged to this type. They occurred in three separate city hospitals. The largest epidemic started at the beginning of July and involved 42 persons, 39 of the hospital staff and three patients. The latter were in one ward, and it says much for nursing staff who were so widely affected that the infection was only passed on to this one small group of patients. It was discovered that a male cook in the staff kitchen was infected and that two members of the family had the illness on 28th June and 2nd July respectively. The infection was therefore present in his home for some time before infirmity staff were involved. In fact, he had ample time to have excused himself from work. The outbreak was in this light preventable.

The second hospital incident involved 21 people at the end of July and the beginning of August. The story was similar to the first in that a food handler was almost certainly the cause, but, on this occasion, most of the victims were patients. A man working in the hospital store from which foodstuffs were distributed throughout the hospital had an attack of diarrhoea which commenced in the middle of a working day. Conscientiously but unwisely he continued work for the rest of the day. He was later proved to have a typhi-murium infection. Consistent with this source, cases of the infection appeared in various wards in the hospital. Broadly speaking, the whole hospital was potentially involved. To prove all the patients free from infection bacteriologically would have been an enormous task. The method of control adopted was a close daily check on the clinical condition of all patients and bacteriological check of any suspicious case. No doubt some minimal and symptomless infections escaped attention, but the method of control which was meticulously executed proved effective. After the first wave of infection only one secondary case of clinical illness occurred.

The third and smallest typhi-murium epidemic occurred also at the beginning of July and affected eleven people. The cause was a patient admitted to a hospital ward (not an infectious spread to other patients in the ward. The remaining 146 cases of typhi-murium infection occurred singly and in small family groups in all areas of the city. This is the smouldering infection, very difficult to deal with, which is ready to burst into flame as an epidemic whenever some individual is misguided or careless.

Salmonella stanley infection occurred in 17 persons. Four of these belonged to a family who run a small restaurant dealing largely

in fish and chips. Suitable action was taken to prevent spread from this source. The City Bacteriologist stated that this was a new type of salmonella in the Glasgow area. Several cases came to notice in various parts of the city at about the same time and it appeared that a common source might be operating as for example, the restaurant mentioned above. The majority of these 17 cases were accordingly closely questioned as regards their movements and possible sources of infection. The result was disappointing from the investigator's point of view. The various single cases all seemed to be unrelated. One appeared to have been infected on the West coast of Scotland, another in the East, a third in London and a fourth in the North of England. The conclusion was that although the infection was new to Glasgow, it was, at the same time, widespread throughout Britain.

Salmonella enteritidis accounted for thirteen infected persons. The majority of these were in two unrelated families, some of whom denied any illness and were only found by bacteriological examination. There was nothing to suggest that the members of either family were infected simultaneously by one article of food, and it is quite likely that one member introduced the infection and subsequently spread it round the family circle, as commonly occurs with dysentery.

Salmonella thomsoni caused a large outbreak of food poisoning but only three of those affected resided in Glasgow. The outbreak arose in a Glasgow establishment catering for weddings and other celebrations. A large number of guests living in Ayrshire and Lanarkshire who had eaten in this establishment had acute food poisoning. One of the Glasgow residents was also a victim. The other two were carriers of the infecting organism discovered when the outbreak was investigated. Both were food workers in the catering firm and both denied any illness.

Occasionally, an exotic type of salmonella appears in Glasgow. *Salmonella anatum*, which occurred in one case, comes into this category.

Fourteen cases were recorded as salmonella infections in which the type of salmonella was not named.

Staphylococcus aureus toxin was responsible for sixteen cases of food poisoning. The largest number in one incident was a family of four in which the vehicle of the toxin was chicken cooked in the home, where contamination probably occurred, and eaten two days after cooking. One interesting case occurred of this type. A man who was in the habit of making a milk drink from a dried milk preparation was

unfortunate enough to suffer two attacks of food poisoning. The attacks were due to dried milk from two separate tins, which however belonged to the same production batch. Fortunately, there appears to have been a small demand for this particular product which might be regarded by some as a dietary fad. The offending batch was withdrawn from sale.

Clostridium welchii is an organism which has recently come into prominence as a cause of food-poisoning. One outbreak affecting 72 hospital patients in two adjoining wards was almost certainly due to this cause. Mince was the article which carried the infection. It was first cooked on a Saturday and served throughout the hospital. The considerable quantity remaining was reheated on the following Monday and served to the two affected wards. The incubation period and symptoms suggested *Clostridium welchii*. Many of the infected patients were aged and rather frail, but happily the illness was of a transient nature and not severe enough to seriously affect them. Cultures were prepared from the mince and the faeces of a few patients, and these cultures contained clostridium of the same types, which are recognised as causing food poisoning. The mince had been allowed to cool slowly before being placed in a refrigerator. This method and the inherent risk from reheated food were contributory factors in causing the outbreak.

The remaining 100 cases were of uncertain aetiology. Of this total, 75 were accounted for by two large outbreaks. The first occurred at the end of August, and 51 people were known to be ill. This outbreak was due to mussels and clams gathered in a sea loch and sold in Glasgow. Some were cooked and eaten on the premises and others were taken home and cooked there. The illness was often of quite a violent nature. The shellfish were heavily contaminated with bacteria, some of which were faecal in origin. No pathogens of the salmonella group were, however, isolated from them. The supply of shellfish from the offending source was discontinued. It is notable that a similar outbreak with 28 known cases occurred in 1950 and that shellfish collected in the same sea loch were blamed at that time. The second large outbreak of unknown cause occurred in a works canteen. Cold mutton cooked the day before consumption appeared to be the unsound article, but none of this was available for examination when the workers sickened. Twenty-four were ill, and the incubation period and symptoms were very similar to those of *Clostridium welchii* infection, but this could not be proved.

The descriptions of the above incidents provide by their variety a fairly comprehensive picture of the problem of food hygiene. It

cannot be too often repeated that where a salmonella food poisoning germ is spread someone who should have washed his or her hands has omitted to do so. The exclusion from work of food workers who are infected or living in contact with infection is a daily occurrence in the work of the department. There remain many, no doubt, who manage to evade this control and occasionally they cause havoc of the type described above. Only an individual sense of responsibility based on a knowledge of the risks can prevent this. Matters of finance are, of course, involved; loss of wages or of payment for overtime or of gratuities is a serious consideration. Other control measures, such as proper food storage, are important. Effort must continue to be concentrated on the essential point of stopping these infections at their source, which is the contaminated hand of an infected person.

SUMMARY OF OPERATIONS UNDER THE FOOD AND DRUGS (ADULTERATION) ACT, 1928; THE PUBLIC HEALTH (SCOTLAND) ACT, 1897; THE MILK AND DAIRIES ACTS; AND ALLIED ACTS, ORDERS AND REGULATIONS FOR THE YEAR ENDED 31st DECEMBER, 1953.

The Food and Drugs (Adulteration) Act, 1928.—During the year a total of 5,183 samples were submitted for analysis under above Act. Of this number, 1,374 samples were formal and 3,809 informal. Fifty or 3·64 per cent. of the former and 83 or 2·20 per cent. of the latter were reported as adulterated. The corresponding figures for last year were 62 or 4·54 per cent. and 112 or 2·85 per cent. respectively. Although the percentage of adulterated formal samples was lower this year than last, the number of cases in which proceedings were taken rose from 23 to 31. Thirty convictions were obtained and penalties amounting to £116 were imposed—£32 more than last year. One case was dismissed on the successful plea of irrelevancy, owing to an unfortunate omission by the court officer responsible for the serving of the summons. This case related to a sample of Glauber Salts containing a high proportion of lead. A product described as “Lanoline” was examined as an informal sample and found to contain, inter alia, 39·95 per cent. of water and 10·98 per cent. of mineral oil. It was considered not to be genuine “Lanolin” as described in the British Pharmacopoeia and therefore could not be successfully pursued in court under a description which was different from that described in the B.P. Nevertheless,

it was considered that the description was by inference intended to convey the impression that it was the same article. The matter was taken up with the manufacturers who ultimately intimated that they had now changed the name of the product to Lanoline Ointment B.P.C. The intrusive E is still present, however, but it may be possible to deal with this article under the Merchandise Marks Act, 1953, which came into operation on 31st July.

Local Authorities have this year been given a forecast of things to come by the circulation of the Food and Drugs (Scotland) Bill and the Draft Food Hygiene Regulations to be made under this statute when it receives Royal Assent. The former amends and consolidates the Scottish statutes which protect the consumer of food and drugs against unsound food or adulterated food and drugs, or the use of false or mis-leading descriptions applied to them. The Regulations are most comprehensive and give power to Local Authorities to enforce a standard of hygiene in all food premises similar to that which is already in force for milk and ice-cream. The success of these new measures will be dependent on the efficiency with which they are interpreted and applied. More than ever before must the responsible authorised officer be a person of tact and experience and have knowledge of Food and Drugs Administration in the application of the complex measures which are about to be presented. The laws relating to food appear now to be catching up on the advances made in modern food manufacture and sale within the last two decades.

Section 8. Registration of Butter Factories and Wholesale Dealers in Margarine.—A number of premises on the register under this section as butter factories remained inoperative in consequence of control by the Ministry of Food—whether they return to this category afterwards remains to be seen. Meantime three premises on the register as butter factories last year have been removed owing to change of occupancy. Similarly 29 premises on the register as wholesale dealers in margarine have been removed for the same reason. It is felt that an intensive enquiry will require to be made in the City as it is not apparently realised by many wholesale dealers in margarine that it is a statutory offence to engage in wholesale dealings unless they have been registered with the Local Authority. The passing of the new Bill is awaited in regard to this point and the effects of the return to uncontrolled marketing of margarine.

Margarine Factories	...	...	...	...	...	...	...	1
Wholesale dealers in Margarine	...	...	...	...	...	...	...	69
Factories of or wholesale dealers in Milk Blended Butter	...	...	...	...	...	...	...	—
Butter Factories	...	...	...	...	...	...	...	9

ABSTRACT OF TOTAL SAMPLES EXAMINED DURING 1953.

Article.	Informal.		Statutory.		Percentage adulterated.		Percentage of Samples taken in each Group in Total	
	No. Taken	No. Non-Gen.	No. Taken	No. Non-Gen.	Infor. %	Stat. %	Infor. %	Stat. %
Milk	2,692	22	901	14	0.82	1.55	70.67	65.57
Milk Products (Butter, Cheese, etc.)	84	5	31	—	3.95	—	2.21	2.26
Meats and Meat Products	275	14	168	24	5.09	14.29	7.22	12.23
Cereals	54	—	53	—	—	—	1.42	3.86
Spirituuous Liquors ...	11	—	60	3	—	5.00	0.29	4.37
Drugs	185	4	27	3	2.16	11.11	4.86	1.96
Flavourings and Condi-ments	127	1	30	—	0.79	—	3.33	2.18
Ice Cream	108	29	11	6	26.85	54.55	2.84	0.80
Miscellaneous Foods ...	273	9	93	—	3.30	—	7.16	6.77
	3,809	84	1,374	50	2.21	3.64	100.00	100.00

ABSTRACT OF INFORMAL AND STATUTORY SAMPLES OF SWEET MILK EXAMINED DURING 1953.

Month.	Informal.				Statutory.			
	No. exam-ined.	No. Non-Genuine.	Average per-centage Composition.		No. exam-ined.	No. Non-Genuine.	Average per-centage Composition.	
			Fat. %	Non-Fat. %			Fat. %	Non-Fat. %
January ...	175	1	3.78	8.72	28	1	3.70	8.73
February ...	268	4	3.79	8.75	99	5	3.70	8.77
March ...	*266	3	3.76	8.74	93	2	3.73	8.73
April ...	236	1	3.78	8.75	80	—	3.67	8.75
May ...	233	—	3.67	8.81	81	3	3.59	8.74
June ...	228	3	3.69	8.91	76	—	3.56	8.91
July ...	216	1	3.80	8.82	75	—	3.61	8.76
August ...	†215	4	3.74	8.75	65	1	3.71	8.79
September ...	*213	3	3.89	8.87	55	1	3.78	8.82
October ...	235	2	4.04	8.90	88	1	3.98	8.94
November ...	206	—	4.03	8.92	81	—	3.93	8.87
December ...	201	—	3.92	8.90	80	—	3.83	8.91
	2,692	22	3.82	8.82	901	14	3.73	8.81

* Includes 1 Superfat.

† Includes 2 Superfat.

1953—Percentage Adulterated : 0.82

Percentage Adulterated : 1.55

1952—Percentage Adulterated : 1.25

Percentage Adulterated : 2.16

The Public Health (Preservatives, etc., in Food) Regulations.—Proceedings under above Regulations were instituted in regard to 18 contraventions as compared with 12 last year. Seven samples of mince were found to contain preservatives during the prohibited period, October to May inclusive, two more than last year, and eleven samples of sausage contained preservatives in excess of the limit prescribed, four more than in 1952. One of the respondents was convicted of a third offence and two of second offences. The sellers of two samples of sausages found to contain minor amounts of excess preservatives in contravention of the Regulations were given warnings.

The following is a list of food in which preservatives were found, with the nature and amounts. One sample of sausages was found to contain 2,540 parts of sulphur dioxide (SO₂) per million parts of sausage which is 2,090 parts in excess of the limit specified in the Regulations. It is to be noted that with the removal of control by the Ministry of Food in 1954 and the return to freedom of manufacture and marketing, the presence of borax in margarine will no longer be permitted. This had been introduced under a Defence Regulation owing to the necessity of providing for prolonged storage during the National Emergency.

ABSTRACT OF SAMPLES OF FOOD IN WHICH PRESERVATIVES, ETC., WERE FOUND AND THE NATURE AND AMOUNT DURING YEAR ENDED 31ST DECEMBER, 1953.

Nature of Article.	Number examined.	Number in which Preservatives, etc., were found.	Nature of Preservative, etc.	Parts per Million.	
				Highest.	Lowest.
Aerated Waters ...	20	2	Sulphur Dioxide	70	58
Cornflour ...	7	3	" "	51	26
Custard Powder ...	17	2	" "	38	32
Dried Fruit ...	36	2	" "	115	38
Fruit Juice ...	11	1	" "	—	269
Gelatine ...	3	2	" "	166	64
Glace Fruit ...	10	4	" "	45	26
Jam ...	9	1	" "	—	38
Margarine ...	21	21	Borax	0.25%	0.09%
Mince ...	63	29	Sulphur Dioxide	954	38
Sausage Meat ...	3	3	" "	173	70
Sausages ...	312	274	" "	2,540	19
Table Jellies ...	18	8	" "	64	19
Vegetables, Dried ...	16	10	" "	704	90
Wines, Alcoholic ...	5	4	" "	237	64
Wines, Non-alcoholic	11	8	Benzoic Acid	403	162

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Table showing Nature and Number of Total Samples procured and Examined during 1953.

Nature of Sample	...	...	No. Taken	Informal	No. Non- Genuine	Statutory	No. Non- Genuine
						No. Taken	
Aerated Waters	...	...	20	—	—	—	—
Aerated Water Crystals	...	...	1	—	—	—	—
Alum	...	...	13	—	—	—	—
Arrowroot	...	...	1	—	3	—	—
Aspirin	...	...	6	—	—	—	—
*Baking Powder	...	...	11	—	5	—	—
Barley	...	...	1	—	—	—	—
Beer	...	...	5	—	—	—	—
Bicarbonate of Soda	...	...	10	—	2	—	—
Black Pudding	...	...	5	—	—	—	—
Boracic Acid	...	...	1	—	—	—	—
Borax	...	...	1	—	1	—	—
Borax and Honey	...	...	1	—	—	—	—
Brandy	...	...	—	—	1	—	—
Brose Meal	...	...	1	—	2	—	—
Butter	...	...	15	—	18	—	—
Cake Decoration	...	...	—	—	1	—	—
Calamine Lotion	...	...	—	—	1	—	—
Calcium Lactate	...	...	2	—	—	—	—
Cascara Sagrada	...	...	8	—	—	—	—
Celery Salt	...	...	1	—	—	—	—
Cheese	...	...	6	1	13	—	—
Chemical Food	...	...	2	—	4	1	—
Chocolate Laxative	...	...	1	—	—	—	—
Chocolate, Drinking	...	...	—	—	1	—	—
Cinnamon	...	...	8	—	2	—	—
Cocoa	...	...	—	—	5	—	—
Coconut, Desiccated	...	...	5	—	6	—	—
Coffee, Ground	...	...	—	—	9	—	—
*Coffee Essence with Chicory	...	...	16	—	—	—	—
*Coffee Mixture	...	...	—	—	2	—	—
Condiment, Non-brewed	...	...	5	—	—	—	—
Confections	...	...	15	7	1	—	—
Cooking Fat	...	...	12	—	17	—	—
Cornflour	...	...	4	—	3	—	—
*Cream, Single and Double	...	...	15	2	—	—	—
*Cream, Sterilised	...	...	13	—	—	—	—
Cream, Synthetic	...	...	14	—	—	—	—
Cream of Tartar	...	...	5	—	4	—	—
Currants	...	...	5	—	11	—	—
*Curry Powder	...	...	4	—	3	—	—
Custard Powders	...	...	4	—	13	—	—
Dates	...	...	1	—	2	—	—
Dripping	...	...	3	—	1	—	—
Egg, Dried	...	...	1	—	—	—	—
Essence of Rennet	...	...	6	—	—	—	—
Farola	...	...	1	—	1	—	—
Figs	...	...	2	1	5	—	—
*Fish Cakes	...	...	3	—	—	—	—

* Subject to Food Standard.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928—*Contd.*

Table showing Nature and Number of Total Samples procured and Examined during 1953—Contd.

Nature of Sample	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
*Fish Paste	3	—	—	—
Flavourings	2	—	—	—
*Flour, Self Raising	15	—	5	—
*Flour, Plain	2	—	2	—
Flowers of Sulphur	7	—	—	—
Friar's Balsam	4	—	—	—
*Fruit Curd	5	—	—	—
Fruit, Dried	5	—	—	—
Fruit, Glace	9	—	1	—
*Fruit Juices	11	—	—	—
Fruit Pudding	2	—	—	—
Fruit Sauce	2	—	—	—
Gee's Linctus	3	—	—	—
*Gelatine	2	—	1	—
Gin	—	—	1	—
Ginger	4	—	5	—
Glucose D	1	—	1	—
Glycerin	1	—	—	—
Glycerin, Lemon, Honey and Ipecacuanha	4	—	—	—
Glycerin of Thymol	5	—	—	—
Gravy Powders and Salts	2	—	—	—
Gregory's Powder	12	—	—	—
Herbs, Mixed	—	—	1	—
Honey	1	—	—	—
Hydrogen Peroxide	5	—	—	—
*Ice-Cream	108	29	11	6
Ice Lollies	29	—	—	—
*Jams	9	—	—	—
Liquid Paraffin	5	—	—	—
Liquorice Powder	11	—	—	—
Lolly Syrup	1	—	—	—
Macaroni	1	—	4	—
Margarine	11	—	10	—
Meat Extracts (Oxo, etc.)	1	—	—	—
*Meat Paste	26	—	—	—
Meat, Potted	2	—	—	—
Meat, Pressed	3	—	—	—
Milk, Condensed and Evaporated	16	2	—	—
Milk, Dried	5	—	—	—
Milk, Sweet	2,692	22	901	14
Mince	22	3	41	9
*Mincedmeat	10	—	—	—
Molasses	2	—	—	—
*Mustards (Compound)	10	—	1	—
Oat Flour and Meal	3	—	1	—
Oil, Almond	4	—	—	—
Oil, Camphorated	6	—	1	—
Oil, Castor	10	—	—	—

* Subject to Food Standard.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1938—*Contd.**Table showing Nature and Number of Total Samples procured and Examined during 1953—Contd.*

Nature of Sample	Informal		Statutory	
	No. Taken	No. Non-Genuine	No. Taken	No. Non-Genuine
Oil, Olive	10	—	—	—
Oil of Peppermint Tablets	1	—	1	—
Ointments, Medicinal	13	—	—	—
Ovaltine	—	—	1	—
Peanuts, Salted	1	—	—	—
Peasemeal	3	—	1	—
Peel	2	—	—	—
Peppers	11	—	9	—
Petroleum Jelly	1	—	—	—
Potassium Permanganate	4	—	—	—
Potato Crisps	1	—	—	—
Raisins	7	—	14	—
Rice and Rice Flour	2	—	2	—
Rum	—	—	7	—
*Saccharin	10	1	1	—
Sago	—	—	1	—
*Salad Cream	9	—	—	—
Salt	5	—	—	—
Salts, Medicinal	4	1	4	1
Sauces	65	1	—	—
Sausage Meat	2	—	1	—
Sausages	194	10	118	13
Semolina	5	—	9	—
Soup Biscuit	1	—	—	—
Soups and Soup Powders	13	—	—	—
Soya Flour	1	—	—	—
Spice	3	—	1	—
Sponge Mixture	1	—	—	—
*Suet	15	1	8	2
Sugars	4	—	1	—
Syrup of Figs	3	—	—	—
*Table Jellies	18	—	—	—
Tapioca	—	—	1	—
Tea	1	—	4	—
Tincture of Iodine	14	3	5	1
Tomato Puree and Juice	2	—	—	—
*Tonic Water	1	—	—	—
Vegetables, Dried	14	—	2	—
Vinegar	2	—	8	—
Whisky	1	—	51	3
Wines, Alcoholic	5	—	—	—
Wines, Non-alcoholic	11	—	—	—
Zett (Pectin Product)	1	—	—	—
	<u>3,809</u>	<u>84</u>	<u>1,374</u>	<u>50</u>

* Subject to Food Standard.

The Public Health (Scotland) Act, 1897.

Section 43. Unsound Food.—Complaints to the number of 113 were lodged by members of the public during the year in relation to food alleged to be contaminated or otherwise unfit for human consumption. Twenty-five of these related to the sale of milk in dirty bottles. In many cases these referred to the delivery of Certified or Tuberculin-Tested milk bottled at premises outside the City boundary. In these cases the matters were reported to the county authorities concerned for investigation and the results conveyed to the complainers. The results of investigations into the few complaints against City dairymen were also passed back and the faults given the earliest attention. Thirty-nine complaints were made concerning the presence of foreign bodies in food ; nails, string, insects, wire, cardboard, paper, etc., etc. These were fully investigated and many found to be simple examples of extraneous matter such as ash from the coke oven or a portion of hemp twine inadvertently falling into the doughing machine of a bakery and finding its way into a loaf or roll of bread. In two cases where rodent contamination had been suspected, microscopical examination revealed the black particles to consist of lubricating oil from machinery bearings. This fact somewhat mollified complainers but the manufacturers were warned. In one case concerning milk a child's toy watch and in another a ball pen were found in full capped milk bottles, indicating a mischievous tendency of children rather than carelessness on the part of the dairyman. Forty complaints were made concerning alleged unsoundness or adulterated food. In most cases these concerned the sale of highly perishable articles containing meat during warm, humid weather conditions. Meat pies and sausage rolls have a very short counter existence under such conditions. The enforcement of the proposed new measures for these articles will improve matters in this direction. Sampling was undertaken following complaints of adulteration. In two cases complaints regarding the conditions in food shops and obstruction of footpath by fish boxes were given attention. Following a complaint regarding the sale of unsound shelled walnuts a purchase was made in a City shop, the walnuts found to be unsound and a charge made against the sellers who were convicted and fined £5. A petition to the Stipendiary Magistrate for the disposal of 10¾ lbs. of walnuts exposed for sale was granted and the unsound nuts were destroyed. A petition for the destruction of 13½ lbs. of coconut ice confectionery declared to be unsound was also granted. Seven complaints were made concerning chemical contamination of mineral water. In these cases examinations were made by the City Analyst and the matters taken up with the manufacturers concerned. A 7-oz. can of Luncheon Meat imported

from France was found to contain a cockroach embedded in the meat. The matter was reported to the importers for investigation and attention in the French factory. Following upon a complaint of illness after consuming skimmed milk powder by a member of the public investigation traced the offending batch and a bacteriological examination isolated *Staph. aureus* in the powder of one of a quantity of 30 tins. The matter was reported to the appropriate Division of the Ministry of Food and a tin from the batch submitted to them for further investigation and examination. This milk powder appeared to have been from the same batch found to have been contaminated in a Middlesex factory but which had inadvertently been omitted when all other stocks had been recalled for destruction. The 29 other cans were destroyed.

Inspection of Food and Food Premises.—There were 10,943 visits of inspection paid to markets, stores, wholesale and retail premises where food is handled—339 more than last year. Of the large quantity of food examined, 2,091 lots were considered to be unsound and were condemned and destroyed with the owners' consent, or otherwise disposed of in such manner as not to be used for human food. The quantity involved amounted to 74 tons, 1 cwt., 88 lbs. or 3 tons, 8 cwt. 24½ lbs. less than the previous year. Included in this quantity of food were two instances where petitions to the court were applied for under the Glasgow Police (Amendment) Act, 1890, for orders for the disposal of unsound food seized in retail premises. The quantities involved totalled 24½ lbs. and references to these are made elsewhere in this report.

During the year it was found necessary to issue 51 notices to cleanse, limewash or repair in connection with food premises generally, including dairies, and 34 notices of contravention of Statutory Instruments were issued. These notices which all had a bearing on food hygiene and hygienic food handling were complied with.

The Milk (Special Designations) (Scotland) Orders, 1951-2.

The Milk and Dairies (Scotland) Act, 1914.—As reported last year one producer of Tuberculin Tested milk in the City was reported to the committee of the Local Authority who after hearing evidence, revoked the licence to use the designation in relation to the milk produced at the premises concerned. The action taken had been so effective that almost from the date of revocation of the licence, conditions improved to such an extent that during the succeeding months only two of 19 samples taken at the farm or at the creamery failed in the tests. The licence was restored on 12th August and a very

satisfactory standard is being maintained to date. Again this year investigation was made where unsatisfactory results of samples could not be associated with evidence of visible contamination. Twenty-four swabs and rinses of utensils and equipment were made at the farm and a number of samples of water taken from the storage tank. The 12 water samples were not consistently satisfactory and the tank was emptied and cleansed. The intensive efforts resulted in finally obtaining satisfactory bacterial results in both the milk and the water samples. Samples of Certified and Tuberculin-Tested milk taken totalled 498. As indicated in the report for last year, the encroachment on agricultural land for housing and other purposes within the City boundary proceeds relentlessly. There are at 31st December 32 registered milk producers on the register of dairies as compared with 37 last year ; three herds producing Certified milk, 27 producing Tuberculin-Tested milk and two herds which although undesignated are on the Ministry of Agriculture and Fisheries register of Attested Herds. These latter two producers, however, consign their milk to creameries to be pasteurised. In addition, there are the two licensed herds of the Western Regional Hospital Board which produce tuberculin-tested milk for use in the hospitals and institutions of the Board. The average number of animals kept in these two herds is 350.

At the end of the year one of the two lady milk officers left to take up a similar appointment in an adjoining county. The duties, however, will be taken over by the remaining officer who, by the use of her motor car and the grant of an allowance to enable her to use it for this purpose, will be able to undertake the supervision of clean milk production without any lowering of the expected standard at any point in the city.

There are at present 22 pasteurising establishments in the City. 12 wholesalers, 18 who are both wholesalers and retailers, 1,365 retailers who handle bottled milk only—32 more than last year—6 retailers who are permitted to bottle milk from bulk—two less than last year—and 12 retailers with Supplementary Dealer's Licences.

There are seven Dealer's licences in force for the designation "Sterilised" but the quantity of this milk sold is exceedingly small. It does not find much favour with consumers in Glasgow. The approximate daily consumption of milk, excluding school milk, in the City, again shows a decline from 86,439 gallons last year to 82,796 gallons this year. Samples of this milk taken for bacteriological and chemical examination totalled 1,447—181 more than last year. This is mainly the increase of samples of Pasteurised milk taken in retail premises with a view to a bacteriological check on the milk as

sold to the public, for purposes of comparison with the samples taken at pasteurising establishments. It will be observed from the following tables that the results of the examinations of designated milks, especially Tuberculin-Tested (Pasteurised) and Pasteurised milks show a substantial improvement over last year. The increase in the consumption of these grades of milk with the drop in sales of raw Tuberculin-Tested milk is shown. This year two more Glasgow dairymen have decided to pasteurise all tuberculin-tested milk sold to their customers. The percentage of milk consumed as " Pasteurised " has now risen to over 95 per cent., the balance being Certified and Tuberculin-Tested.

There are 1,445 registered dairies in the City—24 more than last year, including the 32 producers.

Formal and informal samples of milk taken for analysis numbered 3,593, the average fat and solids not fat content being 3·77 and 8·81 per cent. respectively.

There were 12,428 visits of inspection made to dairy premises during the year when any contraventions or disrepair found were notified and remedied; the numbers are included in the notes of inspection of food premises found at the end of this report. Two convictions were obtained during the year for contraventions of Section 7 of the Milk and Dairies (Scotland) Act, 1914, in respect of the carrying on of the business of a dairyman by two persons without first obtaining Certificates of Registration as required. Penalties of £5 in each case were imposed. There were 365 inspections made of 43 byres in the premises of the 32 milk producers, in addition to the routine visits by the milk officer. These byres have accommodation for 1,137 cows and the average number kept is around 935.

Exempted premises.—There are still six small byres in the City where cows are kept for the use of the owners only, the average number of animals kept being eight.

						1953	1952	1951
CERTIFIED—								
Producers	...	...	...	...	...	3	4	2
Dealers	...	...	...	...	...	772	756	666
Total Average Daily Sales (Gallons)						2,817	3,299	3,545
TUBERCULIN-TESTED—								
Producers	...	...	...	...	...	27	30	31
Dealers	...	...	...	...	...	593	567	566
Total Average Daily Sales (Gallons)						1,394	3,746	3,883

§STANDARD—						1953	1952	1951
Producers	—	—	—
Bottling Establishments	—	—	—
Dealers	—	—	—
Total Average Daily Sales (City Producers only) (Gallons)	—	—	—

PASTEURISED—

Pasteurising Establishments	...	...	...	...	...	22	22	23
Dealers	...	...	...	...	...	1,355	1,372	1,223
Total Average Daily Sales (Gallons)	*78,585	†79,394	‡79,717

STERILISED—

Dealers	7	—	—
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1953—* Includes 2,229 gallons Tuberculin-Tested (Pasteurised).

1952—† Includes 1,863 gallons Tuberculin-Tested (Pasteurised).

1951—‡ Includes 1,979 gallons Tuberculin-Tested (Pasteurised).

§ Ceases as a designation after 30th September, 1954.

RESULTS OF EXAMINATIONS OF DESIGNATED MILK (1)

	CERTIFIED	TUBERCULIN TESTED
	(a) Not more than 30,000 Bacteria per ml. (b) No Coliform Bacillus in 1/10 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliform Bacillus in 1/100 ml.
<i>Bacteriological Examination—</i>		
Number examined	234	262
Number conforming to all re- quirements	196	234
Number exceeding count only	13	8
Number exceeding count and having coliforms present ...	4	5
Number conforming to count but having coliforms present	21	15
Agar Count per ml.—		
Highest	890,000	990,000
Lowest	300	No growth
Presence of Coliforms (—) ...	192	242
(+) ...	42	20
<i>Chemical Examination—</i>		
Fat Minimum 3%—		
(Number 3% or over) ...	231	*244
(Number below 3%) ...	3	*1
Average butter fat content ...	3.92	4.15

* 245 examined chemically.

130 examined biologically with negative result,

RESULTS OF EXAMINATIONS OF DESIGNATED MILKS (2).

	*TUBERCULIN TESTED (PASTEURISED)		PASTEURISED	
	(a) No Coliform Bacillus in 1/100 ml.		(a) No Coliform Bacillus in 1/100 ml.	
	(b) Not more than 2.3 Lovibond Blue Units (Phosphatase Test)		(b) Not more than 2.3 Lovibond Blue Units (Phosphatase Test)	
Number examined	195		756	
Number passing each test ...	189		718	
Number failing in one or more of the tests	6		38	
Milk-Fat Test—				
No. Satisfactory	194		755	
No. Unsatisfactory	1		1	
Average Butter-Fat Content ...	3.74		3.73	

* Tests as for Pasteurised.

92.55 per cent. of the samples examined were in conformity with the terms of the Orders compared with 89.04 last year.

Chemical examination showed six samples to be deficient in fat, while three samples were found to be below 8.5 per cent. of solids not fat.

Milk Supply to the Hospitals of the Western Regional Hospital Board.—This supervisory service to the Board was continued. The results are shown as follows :—

	Examined	Failed
Certified	13	1
Tuberculin-Tested	150	25
Pasteurised	109	11
Tuberculin-Tested (Pasteurised)	13	4
	<u>285</u>	<u>41</u>

Last year 37 samples failed from a total of 266 samples. In addition to above examinations 26 samples of Certified and Tuberculin-Tested milk were examined for the presence of the tubercle bacillus with negative results.

Non-Designated Milk Produced in Premises within the City.—There are two of these dairy farms now left on the register at 31st December, 1953, and both herds are on the Department of Agriculture register of Attested Herds. During the year the licence revoked in 1952 was restored, while two farms were vacated. Twenty-eight samples were taken from five herds during the year while nine of the samples were submitted to biological examination with negative results. The following shows the results of bacteriological examinations of the 28 samples.

No. Taken	Bacterial Count		Coliforms	
	Under 200,000	Over 200,000	+	—
28	26	2	2	26

Milk to School Children.—Pasteurised milk is supplied to the City schools by four contractors. There were 160 samples of this milk examined and no sample was found to be infected with tubercle bacilli. The following Table gives a summary of results of the 160 samples submitted in terms of the Milk (Special Designations) Order. Eight of the samples failed in one or other of the two prescribed tests, the same as last year when eight of 168 samples failed. The failure of two of the samples to pass the phosphatase test has no significance, as the presence of a phenolic substance in the milk was found. This was due probably to the storage of delivered milk adjacent to firelighters in school storerooms.

SCHOOL MILK (PASTEURISED).

No. Examined.	No. passing both Phosphatase and Coliform Tests.	No. failing Phosphatase Test only.	No. failing Coliform Tests only.	No. failing both Tests	No. Tuberculous.	Average Fat Solids.	Average Non-Fat Solids.
160	150	3	7	—	—	3.65	8.76

The following table shows the average daily quantity supplied each month with the numbers of school days in each. The total consumption this year amounted to 1,373,974 gallons, a decrease of 16,823 gallons from last year.

AVERAGE DAILY QUANTITY SUPPLIED.

Month	Gallons	School Days	Month	Gallons	School Days
January ...	6,842½	18	July ...	*15,937	†
February ...	6,736	20	August ...	*48,922	†
March ...	6,650	22	September ...	6,737	21
April ...	7,190	14	October ...	6,893	22
May ...	6,723	19	November ...	6,955	21
June ...	6,448	19	December ...	6,739	17

* Monthly totals.

† No school days, other than the transferred schools these months, but children are supplied with milk at the feeding centres and schools.

The quality standards of these milks are being maintained.

Examination of Dairy Cream for presence of Tubercle Bacilli.—In consideration of the fact that the terms of the Milk (Special Designations) Act, 1949, in relation to "Specified Areas" does not apply to cream, six samples were obtained and submitted to biological examination. The results were negative.

Public Health (Meat) Regulations (Scotland) 1932.—Eleven certificates of approved storage accommodation were granted for premises registered during the year, one more than the previous year. Fifty-two copies of certificates were granted in respect of vehicles operating from these premises, 13 more than last year.

The Ice-Cream (Scotland) Regulations, 1948.—There are 496 registered dealers in ice-cream in the City in respect of premises while 267 Certificates of Registration have been granted in respect of vehicles for the sale of ice-cream only. Inspections of these premises and vehicles totalled 4,160 during the year and 10 notices of contraventions of the Regulations were issued. In connection with the premises, where the Certificate of Registration was revoked last year, it was found that the owner was continuing to carry on the business of a Dealer without a certificate. The provisions of Article 5 of the Regulations having been duly complied with, a complaint was lodged with the Procurator Fiscal and the respondent was fined £5. One notice for repair in premises and ten in respect of contraventions were issued and complied with. Samples were submitted generally to a bacteriological examination in addition to a chemical test. The following table gives results of these examinations of ice-cream compared with results last year.

	No. Examined	No. under 100,000 with Coliforms Absent	No. under 100,000 with Coliforms Present	No. over 100,000 with Coliforms Absent	No. over 100,000 with Coliforms Present
1953	143	119	15	7	2
1952	224	183	19	11	11

The table shows 119 satisfactory samples or 83·2 per cent. compared with last year's 183 or 81·7 per cent. Of the samples which failed in both count and coliform seven of 143 or 4·9 per cent. this year compared with 11 of 224 or the same percentage as last year.

During the year 11 formal and 108 informal samples were taken for chemical analysis under the Food Standards (Ice-Cream) Orders, 1952, and 1953. The standard of the 1951 Order was restored by the Order of 1953 which came into operation on 1st June and is without proviso—Fat 5 per cent., Sugar 10 per cent., Milk Solids other than fat $7\frac{1}{2}$ per cent. Of the 11 formal samples taken six samples were certified as adulterated and proceedings were taken in regard to three of them. Penalties amounting to £15 were imposed (see appendix). Warnings were given in the cases of the other three offenders. It seems a pity that from a purely nutritional point of view it could not have been found possible to allocate table quality Special Margarine fortified by vitamins A and D for use in ice-cream manufacture in place of the more unpalatable "Cake" Margarine allowed for manufacture. I feel sure the objections of many manufacturers to its use in soft ice-cream would not have arisen. Glasgow consumers generally have favoured the custard type of this confection with a low fat content and many have expressed their objection to being dictated to when their freedom to choose for themselves the high or low fat article was

taken from them. As stated in a previous report it should be possible to fix a high and low fat content for ice-cream and provide that option. Of the informal samples taken the following table shows the numbers and composition with averages of quality. Figures for 1952 are underlined :—

	No. Examined	No. Adul- terated	No. Deficient in Fat	No. Deficient in Milk Solids Not Fat	No. Deficient in Sucrose	No. Deficient in Fat and Milk Solids Not Fat	No. Deficient in Fat and Sucrose
<u>1952</u>	<u>184</u>	<u>50</u>	<u>40</u>	<u>3</u>	<u>2</u>	<u>4</u>	<u>1</u>
1953	108	30	23	1	—	6	—
AVERAGES							
			Fat	Milk Solids not Fat		Sucrose	
<u>1952</u>	...		<u>6.42</u>		<u>8.70</u>	<u>24.1</u>	
1953	...		6.15		8.76	14.6	
HIGHEST							
<u>1952</u>	...		<u>14.18</u>		<u>14.6</u>	<u>28.4</u>	
1953	...		13.21		14.67	21.7	

Synthetic Cream.—In the report for last year it was stated that a new factory was planned for the City where the manufacture of high grade synthetic cream would be carried on. This factory is now in operation and all that has been claimed in regard to hygienic structure, plant and processing, have been given effect to. The care and attention to detail by a trained key personnel brought from the London factory are reflected in the excellent bacteriological results of monthly samples. All samples have with one exception had bacterial counts of less than 100. The exception had less than 200 and all were free from coliform bacteria.

Surveys of supplies of synthetic cream as prepared or exposed for sale have also been undertaken in some of the Sanitary Divisions by the Divisional Medical Officers.

Thirty-three samples were taken, however, by the food inspectors, some of which were repeat samples following unsatisfactory first reports. Four were taken for estimation of fat content only and one sample consisted of a canned sterilised synthetic cream taken to check the declaration on the label. Of this number seven samples by reason of high bacterial counts or the presence of coliform bacteria were reported as unsatisfactory and the suppliers informed. Investigation and suggestions for improvement were made with satisfactory results. In one case involving a large bakery concern and with the co-operation of the Divisional Sanitary Inspector, a vast improvement of conditions of preparation of flour confectionery was made. A separate room has

been set apart for this purpose where synthetic cream is prepared. Improved ventilation with a protected cooling chamber was installed. Additional and separate washing and scalding facilities for equipment and utensils in an adjoining apartment and additional and separate facilities for hand-washing were provided.

Shell Fish.—During the year five samples of shell fish exposed for sale in retail premises in the City were submitted to bacteriological examination. One oyster had a bacterial count of just under 11,000 and another of 4,000,000. No coliforms were found in any of the three oysters examined. Three samples of mussels were examined, and two were found to have faecal contamination present in excess of 300 per mussel. One sample of whelks also showed faecal contamination of more than two and less than five per whelk.

One sample of cooked whelks was examined with satisfactory results. The source of the unsatisfactory samples was found to be the same polluted foreshores from which many contaminated samples have been obtained in the past. The local authority of the areas find that in spite of warning notices posted on these foreshores, collection is still being carried on. The measures outlined in the new Food and Drugs Bill would appear to meet this situation and it is hoped will lead to an early end to this potentially dangerous type of trade.

Cleansing of Milk, Mineral Water and Beer Bottles.—During the year 236 washed milk bottles were submitted to bacteriological examination. Fifty-six of the bottles were reported as not being up to the standard of 600 organisms per pint bottle. Reports to the dairymen with subsequent investigations were made and repeat sample taken. The results of bottles washed by the different methods are as follows :—

	No. of Bottles	Satis- factory	Unsatis- factory	Percentage Satis- factory
Washed by Soaker Sprayer Machine	31	30	1	97
Washed by Jet Type Machine ...	148	108	40	73
Washed by Rotary Brushes ...	55	40	15	73
Washed by Hand ...	2	2	—	100

The percentage of unsatisfactory washed bottles is too high, the fault in most cases being due to pure carelessness. Representations have been made to the dairymen concerned with a view to improvement.

In addition to the above examinations, 50 samples of washed milk bottles were submitted to biological tests for the presence of tubercle bacillus. In all cases negative results were obtained. This followed the concern expressed regarding the great misuse of milk containers, especially in a large city and the doubts of some that the washing methods employed were not sufficiently effective in preventing the spread of infection by this means. Twenty-seven washed mineral water bottles were examined. Of these ten were found to be unsatisfactory. This very unsatisfactory result as compared with last year when only two of twenty bottles were so reported was made the subject of detailed investigation which is being continued in several factories. Bottles, detergent solutions and water rinses from separate sections of the washing machines and samples of bottle closures have been taken for examination. It has been concluded that whereas all the samples taken last year were taken in the month of June when the plants were in full daily production, the samples this year were taken in the months of November and December when the plants were running for two or three days per week only. The significance of this is simply that during the period of inactivity, a bottle washing machine can build up countless colonies of bacteria in the tepid water final rinse tank and so recontaminate the washed bottles. Sterilisation of these sections after gaps in production is being arranged. In most cases attention will require to be given to the improved treatment of screw stoppers which are an all too common source of contamination. This matter is receiving constant attention by the trade in an effort to find an alternative to the rubber washer which retains contamination resulting from the misuse of these bottles by some callous members of the public. Five samples of washed stout bottles were taken, four of which were found to be unsatisfactory. A fault in washing routine owing to carelessness was found and corrected.

Fertilizers and Feeding Stuffs Act, 1926.—One sample of fertilizer and 23 samples of feeding stuffs were taken for examination from dairy farms and merchants' premises during the year. The sample of fertilizer and five samples of feeding stuffs were found not to be in accordance with the declared statements of analysis. The matters were taken up with the manufacturers or agents concerned, leading to re-adjustments of statements in some cases. In a few cases the deficiencies were slight.

Prevention of Damage by Pests Act, 1949.

(Threshing and Dismantling of Stacks) (Scotland) Regulations, 1950.—Attention is given to these regulations during the inspections of milk producers' premises throughout the year.

(*Infestation of Food*) *Regulations*, 1950.—Several visits were paid and assistance given in respect of an infestation of “*Ephestia Elutella*” in the cocoa bean store of a chocolate confectionery factory in the City. Intensive cleansing and disinfecting of the store with further proofing of all possible places of harbourage of the moths was apparently for the time effective. This is a matter which is constantly before the trade managements, as each fresh consignment of the beans probably brings fresh infestation, and only constant vigilance and adherence to a strict standard of hygiene can keep the infestation from assuming alarming proportions. Infestation was found in factory premises where edible fat and manufacture of dried meat for animal food is carried on, by the larder beetle “*Dermestes Lardarius*.” The infestation unit of the Department dealt successfully with the conditions.

Bye-Laws for Regulating Street Trading.—As progress in the housing of the population takes the residents further and further from the old shopping centres, the food traders endeavour to retain old and seek new customers. This has resulted in an ever increasing number of applications for approval of vehicles to retail food, and approval of storage accommodation for that food. During the year 1,252 vehicles, with appropriate storage accommodation, were approved and 361 vehicles engaged only on sales of food, where an undertaking had been given that no food remains from day to day requiring overnight storage, were also approved. This is an increase over last year of 361. Each vehicle approved is now marked with the year of issue of permit which is renewable annually. Some of the latest examples of travelling shops are most commendable, the butchers’ being fitted with refrigerated storage cabinets, hot water, hand washing facilities, etc. At the other end of the scale a number of applications were disapproved in respect of storage accommodation or vehicles which were unsatisfactory. It is noted that under the proposed Regulations these and more stringent standards will apply nationally.

The Defence (Sale of Food) Regulations, 1943.

The Labelling of Food Orders, 1950-1953.—Enquiries by letter and telephone are made from time to time by commercial firms anxious to know the extent of the law relating to labelling of food. The following matters were dealt with during the year resulting from analysis of samples.

Gregory's Powder Tablets—Wrongly described on the label. Subsequently corrected.

Synthetic Cream—False and misleading label and incomplete statement of ingredients. Corrected after withdrawal of offending labels (reported also to Food Standards and Labelling Division).

Synthetic Cream—Labelled as containing Dulcin (prohibited as from 1st September, 1953). Old labels recalled and product relabelled forthwith. No Dulcin found in the product.

Synthetic Cream—False and misleading label as to composition of Fat standard. Further action pending if this product not withdrawn from sale.

Tomato Purée—Enquiry regarding correctness of label. Found on analysis to conform.

Tomato Ketchup—Inaccurate statement of contents. Reported to Inspector of Weights and Measures and subsequently corrected.

Oil of Peppermint Tablets—Found to contain .16 per cent. of Talc whereas statement of ingredients declared article to contain cornflour. Warning given. Explanation accepted.

" Doctor's Special " Scotch Whisky—A case referred to the Local Authority related to the permissibility of this label for an old established brand of whisky. The Food Standards and Labelling Division, to whom the matter was referred, held that as the label could be taken to infer that the liquor had restorative or medicinal properties, or was beneficial to invalids the use of this label could be held to be misleading and was contrary to the terms of the Regulations if used for the Home Trade. Proprietors notified accordingly.

Butter Confectionery (Code of Practice)—Samples of sugar confectionery sold under a description where the word Butter or a synonym is used were taken for analysis. In two instances the labels were altered after the attention of the manufacturers was drawn to a butter content of less than 4 per cent. The new labels described the sweets as " Butter Flavoured." In four instances where sub-standard samples were obtained the manufacturers adjusted their recipe to the required 4 per cent. agreed to by the manufacturers' association. One sample was found to contain the agreed 4 per cent. of butter fat.

Metallic Contamination of Food.—Last year a representative number of samples of beer were taken for analysis in order to ascertain the extent, if any, of metallic contamination in that form of refreshment. This year an investigation was made into the purity of ice lollies so popular with young children. Thirty-one samples of ice lollies and 19 samples of canned fruit juices were taken for examination. In regard to " lead " the recommendations of the Metallic Contamination Sub-Committee of the Ministry of Food fixed a limit for beverages ready to drink, other than beer and cider, at 0.2 parts per million. Sixteen of the lollies contained lead to amounts ranging from 0.5 to 8 p.p.m. This information caused consternation to many manufacturers who believed they had done all that was necessary when they provided themselves with the hygienic type of plastic lollies freezing mould. The fact that the mould was not the most likely source of the metal was surprising news to them. The chief offending utensil is in reality the metal can in which the concentrated syrup, water, and sugar, is mixed

and frequently stored for hours with acid dissolving the plumber's solder in the seams. Advice and recommendations on the spot have been given in all cases and steps are being taken to see that they are carried out. It may be that this cause was the chief factor of complaints made by the public in the past and may have been responsible for the condition among children described in the press as "Lollie Mouth." In regard to other metals in the lollies only two showed "Copper" to the extent of 20 and 18 p.p.m. respectively. The source of this contamination was quickly located in the use of exposed copper in items of equipment and the use of these utensils was discontinued. No excess zinc or other objectionable element was found. Iron to the extent of 100 parts per million was found in one sample but apart from the commercial objection that such a proportion might produce a metallic taste not acceptable to the purchaser no action beyond informing the manufacturer was taken.

Eighteen samples of Canned Fruit Juices were taken for examination. Of this number four samples were found to contain lead in excess of .2 p.p.m., viz., 1.0, 1.5, 2.0, and 2.5 p.p.m. Information was passed to the sellers and repeat samples will be taken. With regard to "Tin" the recommendations of the Sub-Committee are that the informal limit of 2 grains of tin per lb. of food has worked satisfactorily in the past but that in view of the improvements in the canning industry a figure of 250 p.p.m. is preferred until more decisive information is available. Of the samples taken two were found to contain 300 parts per million. One source of supply could not be traced by the seller but in the other case information was passed through the importers to the canning factory in South Africa. Following upon receipt of this information the factory later intimated a complete change over of plant and equipment to an all stainless steel processing line.

A sample of imported Italian apples taken from a retail shop in the West end of the City was found to contain arsenic to the extent of 6 p.p.m., or four times the limit proposed by this Sub-Committee. The apples were traced to part of a consignment shipped to the Port of Hull on 7th February and railed to a broker in Glasgow. Information was forwarded to the Hull Medical Officer of Health for his attention. Importers have been notified that cases of gross contamination will in future lead to the detention of affected fruit until some form of cleansing has been carried out.

Food Standards.—Foods to which a standard has been applied are marked with an asterisk in the list of foods sampled. During the

year three convictions were recorded in regard to Ice-Cream (Appendix). One case regarding a sub-standard Shredded Suet remains to be decided at 31st December. The article was purchased under warranty and the case proceeds to proof in the Sheriff Court during 1954.

Food Hygiene.—Where changes in occupancy of food premises, particularly retail dairy premises, take place, opportunity is taken to persuade the new occupier to bring the premises more into line with modern conceptions of hygienic food handling. The new occupier has been influenced to some extent by the information given that new conditions for the food trades generally are contemplated. In most cases at least improvement of both structure, fittings and practice have taken place. In one case which was found just prior to the annual licensing court, the standard of hygiene, indeed the complete lack of any standard, in a public house was brought to the notice of the Chief Constable in view of the proposed change of licensee. The new licence holder carried out forthwith a major reconstruction and applied an improved standard of hygiene within the premises. Meantime the passage of the Bill is awaited with interest when a clearer specification of duties in regard particularly to catering establishments in the City will be established. At present we have different officers administering the statutes relating to hygiene in registered dairies and ice-cream premises from those in other catering premises; food vehicles and catering vehicles are supervised by the former officers as part of the requirements of the Street Trading Bye-laws; food factories manufacturing milk, ice-cream and meat products by different officers from those responsible for the factories where bakery products are made. The problem is probably most acute in Glasgow where Food and Drugs administration is separated from other general sanitary operations, but it has resulted on two recent occasions in undetected breaches of a statute made in 1948. No doubt this matter will be clarified before the Bill becomes law.

Sale of Horseflesh, etc., Regulation Act, 1889.—Two complaints were lodged under Sections 1-4 of above Act against a City butcher found to have horseflesh within his retail premises. Charged with having horseflesh presumed to be intended for human consumption without having advertised the fact and of exposing for sale and selling slicing sausage containing horseflesh, etc., he at first tendered a plea of "Not Guilty" stating when charged that he was storing the meat as food for dogs. Analysis of the sausages having proved the presence of horseflesh, he finally changed his plea and was fined £10 (Appendix).

Merchandise Marks Acts, 1887-1953.

Imported Goods Orders.—Five shopkeepers were charged under the Imported Goods No. 4 Order, 1929, and were fined a total of £7, one being admonished.

One butcher was charged with applying a false or misleading description to imported hen eggs in shell. He advertised as "Scotch Farm Eggs" eggs which were imported from Eire. Failure to act on a previous warning resulted in a complaint to the Sheriff court. The case is sub judice.

ABSTRACT OF COURT PROCEEDINGS.

ADULTERATED SAMPLES AND CONTRAVENTIONS DURING 1953.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Number of complaints	Nature of sample and alleged offence	Number of convictions	Amount of fines imposed	Number dismissed or found "Not proven."	Number deserted <i>simpliciter</i>
7	<i>Sweet Milk</i> —Deficient in Fat	7	£20	—	—
3	<i>Sweet Milk</i> —Deficient in Milk Solids other than Fat ...	3	£12	—	—
11	<i>Sausages</i> —Contained an excess of preservatives ...	11	£50	—	—
7	<i>Mince</i> —Contained preservatives during prescribed period ...	7	£28	—	—
1	<i>Tincture of Iodine</i> —Deficient in Potassium Iodide ...	1	£1	—	—
1	<i>Whisky</i> —Reduced below statutory limit ...	1	£5	—	—
1	<i>Glauber's Salts</i> —Contained an excess of lead ...	—	—	1	—
31		30	£116	1	—

ABSTRACT OF COURT PROCEEDINGS OTHER THAN FOOD AND DRUGS.

Number of com- plaints	Nature of alleged offence.	Number of con- victions	Amount of fines imposed	Number dismissed or found " Not proven "	Number deserted <i>simpliciter</i> .
GLASGOW POLICE (AMENDMENT) ACT, 1890, SECTION 19					
1	Exposing for sale and selling unsound food	1	£5	—	—
MILK AND DAIRIES (SCOTLAND) ACT, 1914					
2	Carrying on the business of a dairyman without having a Certificate of Registration ...	2	£10	—	—
MERCHANDISE MARKS (IMPORTED GOODS) NO. 4 ORDER, 1929, SECTION 2					
5	Exposing for sale and selling imported Raw Tomatoes without having a ticket show- ing clearly country of origin	5	£7	1 (Admonished)	—
SALE OF HORSEFLESH, ETC., REGULATIONS ACT, 1889, SECTIONS 1-4					
1	Storing in retail premises horse- flesh presumed for human consumption without having a notice indicating that horse-flesh was sold there ...	1	(Admonished)	—	—
1	Exposing for sale and selling in retail premises a quantity of slicing sausage containing horseflesh	1	£10	—	—
THE FOOD STANDARDS (ICE-CREAM) ORDERS, 1951-52-53					
2	Deficient in Fat	2	£10	—	—
1	Deficient in Fat and Milk Solids other than Fat	1	£5	—	—
THE ICE-CREAM (SCOTLAND) REGULATIONS, 1948, PART II, SECTION 4 (1)					
1	Storing Ice-cream in premises for which no Certificate of Registration had been grant- ed	1	£5	—	—
THE FOOD STANDARDS (SUET) ORDER, 1952					
1	<i>Shredded Beef Suet</i> —Deficient in beef fat		<i>Sub Judice.</i>		
THE MERCHANDISE MARKS ACTS, 1887-1953					
1	False description applied to food		<i>Sub Judice.</i>		
16		14	£52	—	—
47	Grand Totals ...	44	£168	1	—

SPECIAL SANITARY OPERATIONS.

	1947	1948	1949	1950	1951	1952	1953
(a) FOOD AND DRUGS, ETC.—							
I.— <i>Dairies</i> —							
Registered during year	250	193	185	209	165	270	131
Removed from Register	269	205	193	206	172	250	107
On Register at 31st Dec.	1,425	1,413	1,405	1,408	1,401	1,421	1,445
No. of Inspections ...	16,071	15,789	15,179	14,321	13,039	12,699	12,428
Contravention of Orders, Acts or Bye-laws ...	40	35	15	9	—	57	34
Prosecutions for same	—	—	—	—	—	—	2
Repairs or Improve- ments effected ...	91	36	10	7	—	31	51
II.— <i>Dealers in Ice-Cream</i> —							
Registered during year—							
Premises	42			263	215	60	47
Vehicles							
				187	81	40	54
Removed from Register—							
Premises	36	—	—	31	25	34	38
Vehicles							
				34	30	49	32
On Register at 31st Dec.—							
Premises	444	—	263	447	482	495	496
Vehicles							
			187	234	244	258	267
No. of Inspections ...	3,873	3,902	6,610	5,492	4,914	4,478	4,160
Contraventions of Acts, Orders or Bye-laws	4	3	5	19	—	7	10
Prosecutions for same	—	—	—	4	—	—	1
Repairs or Improve- ments effected ...	16	27	9	4	—	—	1
III.— <i>Byres for Milch Cows</i> —							
No. of Dairy Byres as at 31st December ...	59	57	55	52	50	49	43
No. of Cows licensed for	1,499	1,458	1,383	1,328	1,307	1,287	1,137
Average number kept	1,230	1,281	1,165	1,120	1,129	1,095	935
No. of Inspections ...	423	428	404	379	378	365	365
IV.— <i>Unwholesome Food</i> —							
No. of Inspections ...	10,328	10,493	9,517	9,345	9,598	10,604	10,943
No. of Lots dealt with	3,180	2,380	1,267	1,259	1,747	1,752	2,091
Nature of Food de- stroyed at Inspector's instance with Owners' consent	139 tons	91 tons	110 tons	171 tons	125 tons	77 tons	74 tons
Assorted foodstuffs ...	16 cwts. 30 lbs.	4 cwts. 71 lbs.	6 cwts. 93 lbs.	10 cwts. 105½ lbs.	13 cwts. 82½ lbs.	10 cwts. 8½ lbs.	1 cwt. 88 lbs.

SPECIAL SANITARY OPERATIONS.

	1947	1948	1949	1950	1951	1952	1953
V.— <i>Food and Drugs (Adulteration) Act</i> —							
Informal samples analysed ...	3,372	3,659	4,374	4,406	3,950	3,932	3,809
Statutory samples analysed ...	1,314	1,291	1,326	1,328	1,329	1,365	1,374
Statutory samples found non-genuine	32	34	27	37	20	62	50
Proceedings instituted	24	24	16	22	9	23	31
No. of convictions ...	17	20	15	20	9	22	30
Amount of fines imposed ...	£63	£70	£50	£50	£29	£84	£116
No. dismissed or found "Not Proven" ...	3	1	—	1	—	1	1
No. deserted <i>simpliciter</i>	4	3	1	—	—	—	—
Warranty Defence sustained ...	—	—	—	—	—	—	—
No. Pending ...	—	—	—	—	—	—	—
No. Withdrawn ...	—	—	—	—	—	—	—
No. Dismissed (first offenders) ...	—	—	—	1	—	—	—

FOOD STANDARDS (GEN. PROV. ORDER, 1944)—Fines Imposed—£15.

MERCHANDISE MARKS ACT AND ORDERS—Fines Imposed—£7.

RUSSELL BARR,
Senior Food Inspector.

SECTION XI.

AIR PURIFICATION AND SMOKE ABATEMENT.

Air purification and smoke abatement as an environmental service now holds a front line position in communal interest, from Government level to the private individual. There has been technical advancement in this field, although the legal position in Scotland is not much different from that at the turn of the century. Attention has been drawn to the subject by increased atmospheric impurities due to industrial activity, by dust or chemical emissions, and by the severe fogs from which the city of London has recently suffered. As a result of the last mentioned the Government sponsored a Committee of investigation under the chairmanship of Sir Hugh Beaver, and recently their first report has been published. It is anticipated that before long there will be major developments in the spheres of research, prior approval, smokeless zones and smokeless areas. The country has awakened to the fact that atmospheric pollution and smoke abatement is now a major problem in the sphere of health. The problem will be faced in central and local administration on a scale which will yield both short term and long term results.

This section of the Department has been extremely busy during the past year, largely as a result of the ever increasing volume of complaints that have to be handled along with the initial survey work in connection with the proposed smokeless zone. This work was begun during the year under review, and much of the inspectors' time has been occupied in obtaining the relevant data.

SUMMARY OF OBSERVATION AND INSPECTION WORK CARRIED OUT DURING THE YEAR.

Number of observations of chimneys (industrial)	...	21,700
Number of inspections of steam boiler and other furnaces		339
Number of intimations of excess smoke given	... ..	280
Number of initial warning notices served	... ..	37

The dock and harbour areas are included in the general field work of the section and the figures submitted above are inclusive of that

work. It is to be noted that shipping and river craft present problems not encountered in stationary plants on shore which require a different approach.

Observations on Plant Improvements noted during 1953.—An important factor in the prevention of smoke nuisance is the nature and condition of the plant. An unsatisfactory plant can seldom be effectively managed to prevent excessive emission of smoke or dust. The technical details of all plants visited by the smoke inspectors are carefully noted, and any improvements effected to existing plants or new additions installed which will have direct effect on smoke abatement work are tabulated. There are, however, improvements which are not noted, because there has been no occasion to visit the plant.

The following is a list of specified improvements coming to the knowledge of the Department during the year :—

New steam boilers installed to give increased power	20
Mechanical stokers fitted to steam and heating boiler and other process furnaces	15
New chimneys erected or existing chimneys heightened ...	8
Steam boilers or process furnaces connected to gas or oil fuel	10
Mechanical grit or dust arrestors fitted	4
Other improvements not included above	17

The above figures are improvements of a substantial character and do not refer to normal plant overhaul such as the rebuilding or repair of flue and setting systems or adjustments to mechanical stokers, etc.

It has been the practice in these Annual Reports to cite examples of noteworthy improvements that have been effected. Some such examples are quoted for 1953—

- (a) In connection with the Central Station Hotel and certain station services British Railways have installed three large "Economic" type steam boilers fired by chain grate mechanical stokers. These units replace four old "Lancashire" type boilers, two of which were hand stoked. The old plant had given frequent trouble with heavy smoke emission—and this in the most central area of the city. The conditions are now very good.
- (b) A large wholesale firm in their central premises on the south side of the city have installed two "Lancashire" boilers fitted with fuel oil firing and complete with instrumentation. This new plant replaces two older boilers which were hand stoked, and provides much increased capacity. Chimney conditions are very good.
- (c) A well known firm of cement board makers in the Shieldhall area of the south side have installed a water tube type boiler fitted with chain grate stoking. The new unit replaces an older Lancashire boiler and has now ample capacity for the possible steam load demands. The Lancashire is being held as a stand by. The chimney had been the cause of recurring complaint. Conditions are now almost ideal. An up to date boiler house has also been built.

- (d) A large firm of sheet steel makers in the Springburn district has completely rebuilt one side of the sheet rolling mills. It is of "push button" electric control and drive, and is a remarkable and interesting plant. The consequent reduction of the steam load conditions has led to a marked diminution in the smoke output from the boiler plant chimneys. In addition, the new heating furnaces in connection with this side of the mill are now oil fired and are subject to very close control, being completely instrumented. It is understood that in time the other and older side of the mill will be similarly redesigned and built.
- (e) A well known firm of outfitters in the centre of the city have installed an electrode heating boiler of ample capacity to provide the necessary heating requirements for their extensive premises and also for domestic hot water services. This electric boiler replaces two hand stoked sectional type heating boilers.
- (f) Pinkston Power Station of the Corporation Transport Services is undergoing complete alteration. A conversion to more modern and up to date boiler plant is being carried out. The new cooling tower has been erected and is the largest in Europe, if not in the world.
- (g) The Dalmarnock Generating Station of the Electricity Authority is also undergoing major additions to the plant. To date, sixteen large water tube boilers have been removed from the site, and will be replaced by more up to date units of much increased capacity. A tall chimney of some 300 feet in height has been commenced.

In addition to the above cited examples of primary boiler and furnace plant improvement, other considerable improvements are being effected, such as the addition and substitution of auxiliary plant, including mechanical stokers, oil fuel plant, economisers, preheaters and mechanical grit arrestors.

Complaints Investigation.—This part of the work has been stressed in previous reports because of the amount of time occupied in such investigations. The increasing frequency of complaint by the public is an index of the awareness of the community of the problem, apart from the actual local nuisance caused to many individuals. The uncertainty of times of occurrence of excessive smoke emission often necessitates several visits. The past year has seen more complaints than ever, involving both large and small types of plant.

Most causes of complaint are remedied. The majority of plant users were readily co-operative in abating the nuisance when advice was given.

Prosecutions during 1953.—It must be emphasised that this Department resorts to statutory enforcement of the regulations only when it is seen that the normal procedure of directing the attention of recurring offenders to breaches of the law and the offering of technical advice is being ignored. In such cases, which are few in number, there is no option but to institute proceedings by a complaint being laid before the Procurator Fiscal. The proportion of prosecutions to the

total number of intimations of excess smoke emission served on plant users is small, one to fifteen. The total prosecutions numbered eighteen. Of this total, thirteen were for first offences, and the average fine imposed in the Stipendiary Magistrate's Court was £2. Four cases were for second offences, and the average penalty was £5, though in one case an admonition was given. The Health Committee's limit of two minutes of dense smoke emission in any sixty minutes was in these cases much exceeded.

Shipping in the Harbour Areas.—The dock and harbour districts come within the scope of the smoke regulations, and much observation work is carried out in these areas. Smoke from vessels at berth or in passage on the river can at times be heavy and prolonged. Conditions on shipboard differ materially from those found in stationary plants. The Smoke Inspectorate are all qualified marine engineers. This is necessary in such an extensive harbour area where there is continual movement of shipping—from smaller river craft to large ocean going vessels. Ship engineroom staffs are highly skilled and usually exercise close supervision.

Grit, Dust and Fume Nuisances.—Grit and dust are invariably the result of the use of smaller grades of fuels under mechanical draught conditions, and are the cause of much annoyance and danger. When the operations are on a large scale the conditions set up can be intolerable. In operations where a large volume of free air or gas results and cannot be suitably confined and trapped, e.g., by mechanical arrestor, the abating of such a nuisance becomes difficult. In this category might be instanced quenching towers and discharging sheds connected with coke and oven plants, screening plants at public destructor stations, and certain types of foundry cupolas. Equipment for grit and dust arrestation is of varying principles and designs. It includes plain settling chambers, baffle chambers, spray scrubbers, filter bags, volumetric and multi-cell cyclones and electrostatic precipitators. The trapping of fine dusts, i.e., those below 20 microns in diameter, offer the most difficulty.

A number of complaints involving fumes were received during 1953, most of which arose from simple and evident causes. The burning of debris in the open, including rubber tyres and scrap, smelting and refining of non-ferrous metal, fish curing and smoking, the destruction of insulating board scrap and materials in incinerators, heating processes in the production of fertilizers and coke oven plant operation constituted most of the work done in this connection. Improvement was usually affected by stopping the practice, raising the chimneys,

fitting cowls, and by greater attention to working temperatures. During the period no further trouble was noted from some of the more complex chemical processes that had previously been dealt with.

Pitch Melters in Streets.—A number of years ago the general practice was to melt the pitch at or adjacent to the site where operations were being carried on, especially on repair work. The position was aggravated by the general use of bituminous fuel. Now most of the actual melting is done in central premises, and often prepared material is taken out to replenish the melters at the various sites. Melting is done at the job in large scale operations, as in complete relaying of streets and roadways. Coke is used exclusively as fuel. Most complaints received are in connection with escaping fumes, especially in built up areas. During the year several instances occurred where bituminous fuel was used because the coke supply had run short. The melter crews are now generally very careful in stoking methods, even with coke, and are apparently well warned by the operating companies themselves.

Central Heating Plants—Sectional Types.—Complaints received as a result of the use of these plants continued to require much attention by the inspectorate, especially during the winter. Several hundreds are in operation in the city. Many have been converted to oil burners, and some now have “automatic” mechanical stokers, but a large proportion are still hand fired. Only non-bituminous fuels, such as coke or anthracite, should be used in the latter, but often ordinary bituminous nuts are burned. The smoke emissions can be heavy and prolonged. “Casual” stoking is a cause of trouble and it is continually being impressed on users that attendants should be specially chosen. Many warning intimations were served during the year, and two recurring offenders were proceeded against in court.

Proposed Smokeless Zone in City.—The establishing of such zones in large cities has been a subject of much discussion during recent years. There are at present two such zones, namely, Manchester and Coventry, and many others throughout the country are proposed. In addition, several “smokeless areas” have been declared in new housing districts and estates. The advisability and possibility of such a zone being established in Glasgow was fully discussed by the relevant committees, and during the year it was agreed by the Corporation to seek powers. A preliminary step is the detailed survey of the proposed area, and towards the end of the year such work was begun by the Department. It is estimated that six months will be required to collect the necessary data. The various interests involved will be consulted

when the information is completed. The proposed zone of approximately 182 acres is in the most central area of the city. A number of considerations influenced the choice of this area, and these will be discussed more fully in a later report. It is anticipated that the principle of "prior approval" will be included in the powers sought. Such a principle seeks to require statutory sanction before any new plant is installed or major alterations affecting combustion conditions as regards smokelessness are carried out.

Soot and Atmospheric Precipitation Gauges.—There are five such gauges within the city boundaries, and it is anticipated that the number will be increased in the near future due to the extended areas included within the city's confines. The present gauges are located at chosen sites in the north, south, east, west and central districts. Recordings and estimations have been carried out continuously since 1914. In addition to the city gauges there are two county stations, one at Brenachoile on the north-east shore of Loch Katrine and the other situated at the "Observation Post" in Mugdock Estate, approximately ten miles north. These two stations are used as "check" comparisons with the city stations. The results of the monthly analysis made by the Corporation Chemist are summarised in the following table :—

DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR 1952-53.
(CITY GAUGES ONLY).

						Tons per square mile	
						1953	1952
<i>Insoluble Matter—</i>							
Tar	...	...	...	...	...	3.76	4.05
Carbonaceous other than Tar	...	...	...	...	...	32.71	47.42
Ash	...	...	...	...	...	101.16	122.33
Total Insoluble Matter	...	...	...	...	...	137.63	173.80
Total Soluble Matter	...	...	...	...	...	67.83	74.67
Total Solids	...	...	...	...	...	204.48	248.49
Rainfall in millimetres	...	...	...	...	...	739.00	760.00

The table appended to this report for the section gives the details of the average monthly deposit of each element of atmospheric pollution for the past year and a comparison with the previous six years.

During 1953 the average weight of solid deposit in tons per square mile was 0.276 per millimetre of rainfall, while the corresponding figure for 1952 was 0.326. The total precipitation of solids for 1953 amounted to 204.48 tons per square mile, while the figure for 1952 was 248.40 tons. There was thus a decrease per millimetre of rainfall and also a decrease of total solids. This is not always the case. "Showery"

weather, as distinct from heavy downpour, has a greater "washing" effect on the atmosphere. The average deposit for the six yearly period 1947-52 was 245.06 tons per square mile. The figure of 204.48 tons deposit for 1953 is the lowest yet recorded by the Glasgow District gauges. The average monthly rainfall over the winter period (October to March) amounted to 61 millimetres, and the average deposit of total solids over the same period was 19.44 tons per month. The corresponding figures for the summer period (April to September) was 61 millimetres, and the average deposit of total solids was 16.64 tons per square mile. The total rainfall for 1953 was 739 millimetres, while the figure for 1952 was 760 millimetres.

Courses in Boilerhouse Practice and Smoke Abatement.—The technical instruction of the men concerned with the operation of boiler and furnace plant is considered by the Corporation and this department of paramount importance in the campaign for improved atmospheric conditions. It is a necessary supplement to the practical advice offered by the Smoke Inspectors in the course of their daily duties. Much has been gained by statutory enforcement of the regulations, but much more has been achieved by the education of the personnel concerned. Courses of instruction have been carried on almost continuously since 1910. The session just concluded was the 38th annual winter session. These courses are organised jointly by the Corporation and the Scottish Division of the National Smoke Abatement Society. The total enrolment for the 1953-54 session was 82, and of this number 46 were members of the ordinary or first year class and 36 of the advanced or second year. A total of 28 lectures of 1½ hours each were given, and in addition two advanced lectures to candidates going forward to the City and Guilds of London Institute Examination. Thirty-three men came forward to the class examinations held at the close of the session, 22 taking the ordinary and 11 the advanced question papers. All candidates in both classes gained merit certificates. This is the first occasion on which a full pass list has been noted. The certificates and book prizes are presented at a social meeting held during May each year. This meeting is addressed by members of the Corporation, Smoke Abatement Society Executives and other authority officials.

THOMAS M. ASHFORD,
Senior Smoke Inspector.

AVERAGE DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR EACH MONTH OF 1953.

ENGLISH TONS PER SQUARE MILE.

Mean of 5 Stations	Month	INSOLUBLE MATTER						Included in Soluble		TOTAL SOLIDS						
		Rainfall in millimetres	Tar	Carbonaceous less Tar	Ash	Total Insoluble Matter	Total Soluble Matter	Total Solids, 1953.	Sulphate as SO ₄	Chlorine as Cl.	1952.	1951.	1950.	1949.	1948.	1947.
...
Mean of 5 Stations	January ...	25	·38	3·26	12·84	16·48	5·20	21·68	1·61	·71	33·82	27·20	16·87	24·57	27·98	20·15
"	February ...	26	·26	3·01	9·53	12·80	4·22	17·02	1·37	·84	27·86	23·18	24·10	19·76	22·24	26·48
"	March ...	19	·37	2·44	11·90	14·71	6·15	20·87	1·81	·92	19·84	25·24	19·46	20·58	26·99	22·58
"	April ...	38	·27	·93	7·46	8·66	4·50	13·16	1·62	·75	19·78	20·35	17·05	19·98	20·99	28·47
"	May ...	50	·13	2·69	7·65	10·47	5·17	15·64	1·62	·45	16·41	11·65	11·54	14·14	15·99	24·05
"	June ...	44	·57	2·94	7·99	11·50	4·68	16·17	1·76	·24	17·66	22·81	14·40	12·95	17·58	18·63
"	July ...	110	·21	2·10	6·00	8·31	5·51	13·83	1·93	·57	11·08	13·99	16·41	12·45	10·78	18·85
"	August ...	66	·21	3·25	7·53	10·99	4·46	15·45	1·46	·55	16·03	12·84	16·68	17·20	17·14	No Rainfall
"	September ...	62	·36	2·54	5·34	8·24	5·36	13·61	1·86	·63	18·43	16·93	21·48	10·90	16·48	28·47
"	October ...	56	·34	3·46	8·09	11·89	4·59	16·48	2·22	·58	19·07	16·08	17·51	21·79	18·11	15·04
"	November ...	138	·37	2·74	7·75	10·86	8·97	19·83	2·69	·03	18·03	23·49	46·35	22·05	21·59	23·95
"	December ...	105	·29	3·35	9·08	12·72	8·02	20·74	2·60	1·06	30·48	29·53	22·42	46·88	24·37	24·17
Yearly Deposit in tons per square mile	...	739	3·76	32·71	101·16	137·63	67·83	204·48	22·55	9·33	248·49	243·29	244·27	243·25	240·24	250·84
Monthly mean of all Gauges ...	...	62	·31	2·73	8·43	11·47	5·65	17·04	1·88	·79	20·71	20·27	20·35	20·27	20·02	20·92

SECTION XII.

GENERAL SANITARY OPERATIONS

The city is divided into 37 wards which, for convenience, are administered in five Public Health Divisions, shown as follows :—

EAST.		NORTH.		CENTRAL.	
Ward No.		Ward No.		Ward No.	
1.	Shettleston and Tollcross.	8.	Cowlairs.	11.	Exchange.
2.	Parkhead.	9.	Springburn.	12.	Anderston.
3.	Dalmarnock.	10.	Townhead.	13.	Park.
4.	Calton	14.	Cowcaddens.	19.	Kelvinside.
5.	Mile End.	15.	Woodside	20.	Partick (East).
6.	Dennistoun.	16.	Ruchill.	21.	Partick (West).
7.	Provan.	17.	North Kelvin.	22.	Whiteinch.
		18.	Maryhill.	23.	Yoker.
				24.	Knightswood.
SOUTH-EAST.			SOUTH-WEST.		
Ward No.			Ward No.		
25.	Hutchesontown.		27.	Kingston.	
26.	Gorbals.		28.	Kinning Park.	
33.	Camphill.		29.	Govan.	
34.	Pollokshaws.		30.	Fairfield.	
35.	Govanhill.		31.	Craigton.	
36.	Langside.		32.	Pollokshields.	
37.	Cathcart.				

The area, population and average density (persons per acre) of each Division in 1953 was as follows :—

			Area	Population	Density
East	...	...	8,855 acres	220,556	25
North	...	...	8,172 „	250,865	31
Central	...	...	7,050 „	211,066	30
South-East	...	...	8,246 „	208,647	25
South-West	...	...	7,402 „	193,866	26
City	...	...	<u>39,725 „</u>	<u>1,065,000</u>	<u>27</u>

The following table shows the number of occupied and unoccupied houses in each Division as at Whitsunday, 1953 :—

			Number of Houses		
			Occupied	Empty	Total
East ...	...	...	63,261	265	63,526
North ...	...	...	69,556	314	69,870
Central ...	...	...	61,666	708	62,374
South-East ...	...	...	61,798	380	62,178
South-West ...	...	...	51,502	224	51,726
			<hr/> 307,783 <hr/>	<hr/> 1,891 <hr/>	<hr/> 309,674 <hr/>

A report on the sanitary operations carried out in each Division during 1953 will be found in the pages that follow and the work of this section is summarised in Appendix Table XVI—Operations of Sanitary Section.

CENTRAL DIVISION.

The year under review provided little of an outstanding nature. The normal duties were satisfactorily overtaken and it was found possible to intensify the supervision of catering establishments and to carry further the survey and classification of houses. The rapid development of the Drumchapel and Blairdardie Schemes made heavy demands upon the drainage inspectors. The rodent control section was kept fully employed in meeting the demands for its services. The abatement of nuisances of considerable variety and degree of seriousness absorbed the major part of the inspectors' time. Fuller comment upon the various activities of the inspectorate will be found in the following paragraphs or, under an agreed new arrangement, in the reports of other divisional inspectors. Detailed figures are to be found in Table XVII of the Appendix.

Nuisance Abatement.—Probably the most troublesome type of nuisance in recent years, and one which demands but seldom receives speedy attention, is the defective roof over dwelling-house properties. The high cost of carrying out a major repair is undoubtedly the chief factor in the long delays experienced in having such nuisances removed. A number of roofs were dealt with during the year. A measure of the reluctance or inability of owners to carry out such repairs is the fact that of the 33 statutory notices it was found necessary to issue during the year no fewer than 21 referred to defective roofs or to conditions arising therefrom. It is only fair to observe that of these 33 statutory notices 18 were necessitated through what appears to be the settled policy of one property owner. This owner seems determined to ignore

all demands for repairs to his properties and almost invariably has to be subjected to proceedings in the Sheriff Court before compliance with notices is obtained. The hardships and health conditions of his tenants seem to be of no concern to him.

Proceedings in the Sheriff Court were necessitated in nine instances. Of these, one was dismissed without costs on the work being completed and three are still before the court. In the others the work was decreed to be done by the owner or the Corporation and expenses awarded to the Town Clerk. In one case where the Corporation were decreed to carry out the work the Town Clerk made use of the powers contained in Sec. 150 of the Public Health (Scotland) Act, 1897, to recover the cost. This was done by diverting the rentals to the Corporation until the amount of the bill had been met. In the two cases carried over from the previous year the Corporation were decreed to carry out the work and awarded expenses.

Catering Establishments.—In the absence of specific legislation the attempt during past years to secure higher standards of hygiene in catering establishments has depended to a great extent on propaganda and persuasion. A great deal of progress was made along these lines, and tribute might be paid here to the pioneer work of Mr. Robert Bell of the Central Division in securing the co-operation of managements and staffs in this campaign. Despite this co-operation and the high standards attained in many establishments there yet remains a substantial degree of apathy and indifference to be overcome, and the advent of Regulations, now in draft form, will provide a much needed and long awaited weapon of enforcement. Visitation of these premises was carried on throughout the year and inspectors noted considerable improvement in many establishments. Where unsatisfactory conditions are noted, a letter detailing these is sent together with a memorandum covering the essential conditions for reaching and maintaining a high standard of hygiene. A very common practice among restaurateurs was found to be the use of bulk milk contained in large cans. These were generally found lying open in the kitchen and exposed to all kinds of contamination. In such cases a change-over to bottled milk was recommended. A number of those who have adopted the recommendation have expressed themselves as agreeably surprised at not only the improvement in hygienic conditions but the financial savings effected. One of the commonest faults encountered was the much too low temperature of the final rinsing water; this should be at least 170°F. to effect any degree of sterilisation. Other unhygienic practices commonly met with were faulty storage of food and utensils and permitting animals, generally cats, the freedom of the kitchen.

Towards the end of the year, by arrangement with the bacteriologist, a start was made with the investigation of the efficiency of the methods of cleansing and sterilising crockery and cutlery. The data so far available is insufficient to enable any definite conclusions to be reached.

Rodent Control.—The general review of this work appears elsewhere but certain figures not included in that report are given below.

No. of Accounts rendered	...	1,200—totalling	£2,128 18 11
No. of Accounts paid	...	1,121—totalling	£2,026 14 8
No. of Accounts outstanding		79—totalling	£102 4 3
Houses treated free of charge	...	...	305
Estimated cost (1,240 hours)	...	...	£310 0 0

<i>Materials Used—</i>			Cwts.	Qrs.	Lbs.
Tomorin	...	...	1	1	13
Warfarin	...	...	9	2	14½
Squill	...	...	—	1	2½
Cymag	...	...	—	1	5½

Housing.—A small but welcome step forward was taken in the representation of unfit houses under the Housing (Scotland) Act, 1950. Demolition or Closing Orders were obtained for 60 such during the year as compared with only 10 in 1952. It is to be hoped that this movement will be greatly accelerated during the ensuing year. Three properties comprising 37 houses previously condemned as unsafe by the Dean of Guild were demolished. Three others containing 40 houses were declared dangerous. At the end of the year nine tenements containing 117 houses awaited rehousing of the tenants before being demolished as unsafe. The long period which elapses between condemnation either by Dean of Guild or Housing Act procedure and rehousing of the tenants illustrates the difficulty in providing alternative accommodation. During the year nine tenements were offered to the Corporation, of which four were accepted, four refused and one was still the subject of negotiation. Of the four refused three were subsequently abandoned by the owners.

New building proceeded apace at Drumchapel and Blairdardie. A number of the Drumchapel houses were occupied during the year. In the west end of the city 17 large houses were converted into 45 flats.

Rent Restrictions Acts.—There were 50 applications for certificates of disrepair of which 24 were granted and 26 refused. Of three applications for "reports" by owners, two were granted and one refused. These figures are approximately the same as those of the preceding year.

Common Lodging-Houses.—The number on the register at the end of the year remained unaltered. One seamen's boarding-house (The Asiatic Seamen's Home) situated in Queen's Dock was transferred from the supervision of the Central Division to that of the Port Health Authority by mutual arrangement. All lodging-houses were the subject of regular inspection and in general any contraventions of the byelaws were of the type that have become familiar during past years and were remedied after written or verbal warning. One difficulty in maintaining the desired standard of cleanliness in such places is that the number and quality of cleaners employed is sometimes quite inadequate. It was found necessary to raise this point with one keeper during the year.

Reference might again be made to the question, raised for several years past, of the charges made for accommodation. In most cases these are now so far over the legal maximum of one shilling per night that a very substantial rise would require to be sought to retain the existing lodging-houses within the definition. Such an increase might bring under control certain establishments not hitherto registered as lodging-houses and opposition would undoubtedly be encountered. The time seems ripe for consideration as to whether a new definition might be sought based on some other, and more stable, factor than the charge for accommodation.

Farmed-out Houses.—The number of these decreased by 18 during the year due to the demolition of a tenement in Hunter Street. The normal inspections were carried out and nothing calling for special comment noted.

Limewashing of Closes and Staircases.—This required the issue of 891 notices, of which 754 had been complied with by the end of the year. As usual a number were done voluntarily by the owners. It was found necessary to institute proceedings against one owner for failure to comply with a notice, but before the case was called he carried out the work and proceedings were abandoned.

Dirty Houses, Bedding, etc.—Action required to be taken under Section 9 of the Glasgow Police Act, 1890, against the occupier of a dwelling-house for failing to cleanse after service of a notice to do so. The woman in question proved quite adamant and court action became necessary. She was fined £1 after being given time to comply with the law, which she failed to do.

Aged Persons.—About 30 cases of aged people living alone without proper care and attention and often in insanitary conditions were dealt with. In 5 of the cases the powers of compulsory removal in Section 47 of the National Assistance Act required to be used, 4 under emergency procedure and 1 by the normal channels. As in recent years, a number of the houses required cleansing and disinfection.

Supervision of Rehousing Schemes ; Inspection of School Children.—The nurse-inspectresses were kept fully employed during the year in carrying out these duties in addition to the pre-rehousing visitation. With the development of Drumchapel and Blairdardie the question of time lost in travelling is assuming considerable importance both for the nurse-inspectresses and the male inspectors. The nurse inspectresses are of the opinion that a number of the tenants now being rehoused in “ ordinary ” schemes are of a type that will require considerable supervision.

Sanitary Conveniences.—The figures of these show no notable change from the preceding year. Houses with baths, of course, increase year by year in number and proportion as housing development continues.

W.C's used in common :—

Serving 2 tenants	997	Decreased by 1
„ 3 „	1,246	No change
„ 4 „	591	Decreased by 11
„ 5+ „	205	No change
	<hr/> 3,039 <hr/>	
Dry closets and privy middens	14	Decreased by 1
Ashpits	28	Decreased by 7
Houses without internal water supply	30	Decreased by 2
Houses with baths	35,302	Increased by 626

G. D. LAUDER,
Divisional Sanitary Inspector.

NORTHERN DIVISION.

The Division, comprising eight wards of the City, extends to 8,172 acres and has an estimated population of 250,865 persons. This is equal to a density of 30·7 persons per acre. There are 69,870 dwelling-houses distributed throughout the Division with densities of population and houses higher in the central City wards of Townhead, Cowcaddens, and Woodside than in Cowlairs, Springburn, Ruchill, North Kelvin and Maryhill (see Appendix Table I, page 296). There are an additional 772 houses in the Division since Whitsunday, 1952.

TOTAL NUMBER OF HOUSES IN NORTHERN DIVISION
AT WHITSUNDAY, 1953.

Ward	Size of Houses					Total at	
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	Total	Whitsunday 1952
8	1,423	4,694	1,713	244	33	8,107	8,166
9	631	2,278	2,283	2,986	326	8,504	8,361
10	1,398	5,211	2,366	633	107	9,715	9,764
14	1,413	4,484	1,404	174	58	7,533	7,610
15	1,709	4,344	1,203	398	288	7,942	7,982
16	549	2,722	5,926	2,703	375	12,275	11,819
17	1,314	4,077	1,915	548	596	8,450	8,424
18	633	3,421	2,404	641	245	7,344	6,972
Total	9,070	31,231	19,214	8,327	2,028	69,870	69,098

The majority of the houses in the Division are of one and two-apartments with rentals averaging between £7 15s. and £15 15s. per annum. Most of these houses were built 70 to 80 years ago and the incidence of disrepair occurring reached its peak in recent years. Because of restriction in income from the houses and high costs, much of the necessary repair has been neglected. The result is slow dilapidation. It is doubtful if the proposals contained in the Housing Repairs and Rents (Scotland) Bill, at present being debated in the House, will be effective in altering the position in properties with low rentals. Much of the disrepair is of a major character, involving structure of roofs, chimney-heads, and dilapidation of out buildings and will involve heavy capital expenditure to put right.

The sanitary conditions in the Division are being influenced by the increasing dilapidation of property, and until a progressive scheme of slum clearance and of rehabilitation with adequate financial support is put into operation little or no improvement can be expected.

PUBLIC HEALTH (SCOTLAND) ACT, 1897.

Nuisances.—During the year 4,549 complaints, made either by post or verbally, were investigated. These, along with nuisances discovered by routine inspection, resulted in 12,966 intimations in terms of the Act being issued.

At the end of the year 14,268 nuisances had been removed. These covered a wide variety of conditions, details of which can be found in Table XVI. The difficulty experienced in having nuisance removed when major repair is involved is reflected in the large number (98) that had to be reported to the Local Authority for sanction to issue the statutory notice in terms of Section 20 of the Act. Thirty cases had to be referred to the Sheriff Court before nuisance was abated. Of these reported to the Sheriff, 18 were successfully dealt with and 12 others were pending at the close of the year. The Local Authority were awarded a total of £76 13s. expenses incurred by having to take court proceedings.

A nuisance of rather an interesting nature was investigated. Complaints had been received of offensive smells penetrating dwelling-houses and other premises adjacent to certain hair-dressing establishments. On investigation these complaints were confirmed, the smells being due to sulphuretted hydrogen. It was found that this gas was evolved when heat was applied to hair which had been previously treated with a solution of ammonium hydrosulphide and ammonia. During busy periods the smells were prolonged over several hours. From enquiry it was found that the majority of ladies' hairdressers were using chemical solutions supplied by the manufacturers of the hair waving appliances but that others were using solutions made up to their own formula. Samples of solutions submitted to the City Analyst revealed that those used at premises where complaints were arising were four times stronger than those supplied with the appliances. The results of the analysis of the solutions were as follows:—

			Sample of Solution where complaints were arising	Sample of Solution as supplied by manufacturer of appliances
Sulphide (H_2S)	...	...	1.78% W/V	0.47% W/V
Total Ammonia (NH_3)	...	...	7.49% W/V	9.46% W/V
Mineral Oil	...	...	Present	Absent

These results correspond to the following composition:—

Ammonium Hydrosulphide	...	2.67% W/V	0.71% W/V
Ammonia Solution (Specific Gravity 0.880)	...	20.6% W/V	29.0% W/V

The City Analyst commented as follows :—

“ A solution of ammonium hydrosulphide has an objectionable odour, the liquid when heated decomposes with the formation of ammonia and sulphuretted hydrogen . . . ”

The discrepancy in the strength of solutions was brought to the notice of those concerned. A revised formula for the solution was experimented with and was adopted after proving that the offensive smells were reduced to negligible quantities. It is interesting to note that the manufacturers of the appliances are now supplying solutions which they claim are odourless.

A complaint of the emission of dust from a factory where fertilisers are manufactured was investigated. This was an establishment where a considerable expense on plant and buildings had been incurred to reduce to a minimum nuisance that might arise from the processes. The weather prior to the Department receiving the complaint was dry, with a light wind from an easterly direction, conditions that were favourable to the settlement of a dry film of dust over the area in the vicinity of the factory. Investigations revealed defects in the mechanism of the plant which had been allowed to develop, and which on receiving attention removed cause for complaint. The nuisance need never have occurred if due care had been observed in the maintenance of the plant.

The condition of the Molendinar Burn in the vicinity of Drygate required the attention of the riparian owners during the year. After intimation of nuisance the owners agreed to the City Engineer arranging for the cleansing to be carried out at a cost of £325, to be borne proportionately by each.

Insect Control.—Three-hundred and eight complaints of insect infestations were investigated and remedial action taken. The usual precautions were taken to deal with fly nuisance that might arise in ashbin shelters, stables, offensive trades, etc. In addition, 857 houses were visited in connection with bug infestation, and 1,315 apartments along with furnishings treated by the D.D.T. Unit. The common insects found infesting dwellings and other premises included house flies, stable flies, sewage flies, cockroaches, bed bugs, and spider beetles.

A rather unusual complaint was dealt with towards the end of November. Tenants of the ground flat houses in a tenement property reported a swarm of “ maggots ” in the back entry to the property. On investigation larvae were discovered over the paving of the entry and on examination of the back court, which was of earth with patches

of grass, revealed considerable larvae of a similar type. Specimens were collected for identification and were found to be the larvae of the *Tipula* (Sp.) leather-jackets. These are harmless from a health point of view. To reassure the occupants of the houses the Department's Disinfestation Unit were asked to treat the courts with a preparation of D.D.T. Thousands of larvae were brought to the surface and destroyed. The unusual feature of the incident was that these insects had selected an area remote from agricultural land to deposit their eggs, also the unusually late period of the year (November) for the larvae to make their appearance. The explanation for the latter was the unusually long autumn, mild weather extending until the end of the year.

Offensive Trades.—Five offensive trades are registered. These include :—

Skin and Hide Factor	...	...	...	...	1
Soap Boiler	...	...	...	...	1
Tanner	...	...	...	...	1
Horse Slaughterer	...	...	...	...	1
Knacker	...	...	...	...	1

The premises were visited on 44 occasions when conditions were found to be satisfactory.

An application in terms of Section 32 of the Act for the establishment of a bone-boiler's business within a food factory was submitted for report. When the application and report came before the appropriate committee of the Corporation for consideration objections by residents in the area to the application were lodged and in consequence consent to establish the business was refused. On appeal by the applicants against the Corporation's decision to the Secretary of State for Scotland an enquiry was held. The result of this enquiry is not yet known.

Renewal of licences were granted to Messrs. W. C. Hodgekinson, Ltd., to continue to carry on the businesses of horse-slaughterer and of knacker. The knackery was completely rebuilt during the year the old buildings being replaced by a modern structure including drainage at an approximate cost of £16,000.

Piggeries.—Eighteen licences were issued to owners of piggeries. These were visited on 69 occasions and any default of the byelaws dealt with.

Common Lodging-houses.—Four lodging-houses are registered with accommodation for 1,352 persons. The houses were visited on 69 occasions and conditions found reasonably satisfactory.

Tents, Vans and Sheds.—In terms of Section 73 of the Public Health (Scotland) Act, 1897, a tent, van, shed or similar structure, used for human habitation, which is in such a state as to be a nuisance or injurious or dangerous to health, shall be a nuisance liable to be dealt with summarily under this Act. A Local Authority may make byelaws for promoting cleanliness and preventing the spread of infectious disease. Byelaws for promoting cleanliness, habitable conditions, and preventing the spread of infectious disease were put into force in the year 1904. Further powers were obtained in 1929 which made it unlawful for any persons without the consent of the Local Authority to—

- (a) let or use or permit to be used any land situated within the City for occupation by any tent, van, shed, or similar structure used or intended to be used for human habitation ;
- or
- (b) to place or keep on any land situated within the City any such tent, van, shed or similar structure.

Safeguards were provided for temporary residence and for bona fide showmen whose normal residence is a van. In the first instance, consent is not necessary if the stay does not exceed fourteen days and in the second if it does not exceed six months. The value of these powers has been proved during the past years, for despite grave housing shortage in the City there is little or no increase in the number of families using temporary structures for habitation. Areas where dwelling vans are located and for which consent of the Local Authority has been obtained are used predominantly by those in regular employment as travelling showmen. Most of the areas have permanent sanitary conveniences and piped water supply. Refuse facilities are arranged by the Cleansing Department.

There are thirteen areas or sites provided in the City, as follows :—

Eastern Division	...	...	5 Sites accommodating	60 Vans
South-Western Division	...	...	2 " "	50 "
Northern Division	...	...	6 " "	90 "

The sites are visited at regular intervals to detect any default in the observance of the byelaws. Apart from occasional overcrowding of vans on the sites it is seldom necessary to take action. The vans themselves are usually well kept, the owner-occupiers being especially conscious of the spick and span appearance of their homes.

GLASGOW POLICE ACTS.

Important duties are placed upon the Sanitary Inspector in the above enactments and include the enforcement of the byelaws in respect of—

Cleansing of Common Passages and Stairs.—Three hundred and fifty-four complaints of neglect by tenants to take their turn of cleansing common passages and stairs in rotation were investigated during the year. Much disagreement and bitterness can be caused among neighbours by the failure of one tenant to observe the elementary need for cleansing the close or stair in turn. Much of the inspectors' time is taken up in settling disputes and enforcing the provisions of the byelaws. It was found necessary to issue 6,257 rotation cards; these include those issued to all tenants in rehousing schemes each year.

Limewashing and Painting of Walls, etc., of Closes and Staircases.—During 1953, 992 notices were issued to owners of dwelling-house properties requesting them to lime-wash and/or paint the walls of the closes and staircases. Of those issued, 776 notices were complied with, and in addition 117 properties were dealt with voluntarily by the owners. At the end of the year 342 notices were outstanding. Much of the delay is due to the reluctance of the operatives of the painting trade to undertake this type of work, also to the high cost to the owners.

Drainage.—In terms of the Glasgow Streets, Sewers and Buildings Act, 1937, all drainage installed in buildings is tested by the Sanitary Inspector and if found satisfactory a certificate to that effect is deposited with the Master of Works. This requires having a staff technically competent and with a detailed knowledge of the Byelaws regarding the installation of drains and plumbing work. The byelaws at present in force have been in existence since 1900 and in consequence are restrictive in permitting experiments towards the simplification of drainage design. Any experimental work that has been carried out has been in Housing Schemes where relaxation of the byelaws is provided for in the terms of the Housing Acts. This has been of value in showing that considerable simplification in drainage design can be effected without creating risk to health. Unfortunately simplification has in some instances been carried to the extreme, thus creating potential health hazards. At time of writing the Department of Health for Scotland has issued to all Local Authorities Model Building Byelaws for their consideration with a recommendation that these should be adopted with the minimum of amendment in order to have uniformity of practice throughout the country. The section on drainage has much

to commend it for, while laying down certain fundamental principles it leaves room for new ideas on design and new materials to be adopted. The "deemed-to-satisfy" clauses should be invaluable to those who have to prepare schedule of works and contracts as these follow closely the British Standard Code of Practice issued by the Council for Codes of Practice for Buildings.

During 1953 the smoke-test was applied on 194 occasions to the drainage of the following completed work in the Division :—

Dwelling-houses	...	...	...	...	...	...	...	1,730
Factories	...	...	...	...	...	...	...	28
Schools	...	...	...	...	...	...	...	7
Alterations to premises of various types	...	...	...	...	...	...	...	25
Existing tenement property	...	...	...	...	...	...	...	6

and in addition the smoke-test was applied on 239 occasions to work in progress. Drainage work being carried out in the City as a whole called for the application of the smoke-test on 2,364 occasions and 15,516 visits were made in course of supervising the work in progress. The drains of twenty old properties were tested on account of their condition being suspect. Defects revealed by these tests were remedied by the owners.

Water Supplies.—A continuous check on the quality of the water being supplied from Loch Katrine was maintained and 416 samples obtained at Milngavie Reservoirs before and after chlorination were submitted to the City Bacteriologist for analysis. The water entering the service mains was found to be of a consistently high quality. The survey started in 1952 of the cisterns for the storage of water for dietetic purposes of which there are 1,295 situated in the attics of the tenemental property located in the higher parts of the Division was completed. This involved 562 visits and 644 cisterns being cleansed. During the course of routine visits to property 601 burst pipes or defective water fittings were discovered and brought to the notice of the Water Engineer for his attention.

Prevention of Damage by Pests Act, 1949.—Details of the work carried out under the provisions of the above Act are contained in the table on page 278. No special difficulties were experienced in having infestations promptly dealt with. In most instances the services of the Department's Rodent Control Section were sought.

RAT DESTRUCTION OPERATIONS UNDERTAKEN DURING 1953.

Type of Premises.	Primary Visits.	No. of Premises found infested.	Degree of Infestation. Light. Heavy.	Rats Destroyed.	Mice Destroyed.	Hours chargeable to Owner or Occupier.	Cost to Owner or Occupier. £ s. d.	No. of Visits made % proofing and trapping.	Premises proofed.
Dwelling-houses and Basement Cellars ...	1,647	346	340	6	1,240	147	£372 6 3	773	198
Offices and Institutions ...	64	21	20	1	143	184	61 12 6	46	11
Food Factories ...	135	37	35	2	239	459	86 1 3	77	17
Food Shops ...	304	29	28	1	188	70	39 18 9	155	21
General Factories ...	297	21	18	3	233	73	56 11 3	172	9
General Shops ...	342	36	32	4	194	60	31 3 9	192	25
Restaurants ...	45	4	4	—	31	7	5 18 9	31	4
Farms, Stables, Piggeries, etc.	97	18	15	3	626	31	68 12 6	46	4
Offensive Trades ...	22	6	1	5	614	—	47 15 0	15	2
Coups ...	41	4	2	2	274	—	25 6 3	31	—
Sewers ...	32	1 (Area)	—	1	262	—	10 5 0	15	—
Totals ...	3,026	523	495	28	4,044	1,031	£805 11 3	1,553	291

FACTORIES ACT, 1937, AND 1948.

Factories in the Division were visited on 2,334 occasions and 543 defects discovered and brought to the notice of the occupiers.

Defects found included —

Lack of cleanliness	...	...	...	...	191
Unreasonable temperature	...	...	...	...	1
Sanitary conveniences—					
(a) Insufficient	...	...	...	...	3
(b) Unsuitable or defective	...	...	...	...	256
Other defects	...	...	...	...	49

Factories included in the Register were :—

	1953	1952
Mechanical	661	660
Non-mechanical	34	36
Mechanical Bakehouses	63	65
Non-mechanical Bakehouses	38	38

In addition, 390 workplaces and stores were visited to determine whether satisfactory conditions were being maintained. A list of 84 outworkers was notified by employers in terms of Section 110 of the Act. The homes of these persons were visited to ensure that the work—wearing apparel—was being carried out in wholesome premises.

Catering Establishments.—Visits were made to restaurants, canteens and fish-restaurants on 673 occasions to ensure that food was being prepared and served under hygienic conditions. Generally the conditions found were good. On 68 occasions defects were noted and brought to the notice of those concerned.

Shops Act, 1950.—Following the detailed survey of the retail shops in the Division in 1952, those found with unsatisfactory conditions were revisited and where possible improvements effected, including premises with :—

Sanitary Accommodation insufficient and defective	...	14
Defective drains	...	16
Dirty premises	...	9
Infestation of rats and mice	...	27

A total of 413 visits were made.

Rag Flock and Other Filling Materials Act, 1951.—The provisions of this Act were enforced as required. The 17 premises registered were visited and the records of the materials handled were checked. One sample of rag flock was submitted to the prescribed analyst for examination. This was found to be satisfactory.

Housing (Scotland) Act, 1950.—Satisfactory progress in the provision of new houses within the Division was maintained during the year with the completion of 1,579 houses. Four housing areas are in course of development as follows :—

Milton	...	...	...	...	...	Comprising	2,972	houses
Barmulloch	...	...	...	...	...	„	1,656	„
Cadder Road	...	...	...	...	...	„	976	„
Royston Road Development	...	...	...	...	...	„	156	„

Details of the houses completed during 1953 are as follows :—

			1-Apt.*	2-Apt.	3-Apt.	4-Apt.
Milton Scheme	...	...	80	—	241	172
Barmulloch	...	...	20	—	481	27
Cadder	...	...	—	14	309	79
Royston Road	...	...	—	—	99	57

* Single-person flats.

The construction of dwellinghouses in the Milton and Barmulloch housing areas is now almost complete and building activity is concentrated on the provision of schools, churches and shops, so that they will become self-contained communities. All the houses in the Royston Road Development Area have now been occupied by families from uninhabitable dwellings. Since 1945, 6,648 permanent and 413 temporary houses have been built in the Division by the Local Authority or by the Scottish Special Housing Association.

Uninhabitable Houses.—One hundred and forty houses were represented to the Local Authority as being unfit for human habitation in terms of Section 9 of the Act. In addition, the Master of Works had to report to the Dean of Guild Court 35 houses as being structurally unsafe. The following table indicates the actual number of houses closed or demolished during the year. This includes a number of houses represented in previous years but not finally dealt with until the City Factor could provide alternative accommodation.

HOUSES DEMOLISHED OR CLOSED DURING 1953.

				Demolished	Closed	Demolition or Closure Pending— Awaiting Rehousing of Tenants
<i>Represented under Housing Acts—</i>						
1953	...	...	140	—	18	122
Previous year	...	...	35	20	15	—
<i>Reported by Master of Works to Dean of Guild Court—</i>						
1953	...	...	35	—	—	35
Previous year	...	...	191	164	—	27
				<hr/>	<hr/>	<hr/>
				184	33	184
				<hr/>	<hr/>	<hr/>

Abandoned Properties.—There are now 36 properties containing 436 dwellings listed as having been abandoned by their owners. The cost to the Department in dealing with nuisances occurring in these properties amounted to £171 6s. 2d.

Properties Offered to the Corporation.—A further 22 properties containing 269 houses were offered to the Corporation either at a nominal price or free of purchase price. Of these offers five have been accepted, five refused and negotiations to acquire the other 12 properties are proceeding. Since 1948, 36 properties containing 405 houses have been taken over.

Overcrowding.—Most of the new houses built in the various housing schemes are used to alleviate overcrowding. These are allocated by the City Factor according to the date of application for a Corporation house by the householder. During the year 1,576 houses were decrowded, involving the transfer of 7,960 persons to larger houses. Subsequent visits to the decrowded houses revealed that in 82 per cent. overcrowding no longer existed, in 9.2 per cent. overcrowding was reduced, in 4.5 per cent. overcrowding was unchanged, and in 4.2 per cent. overcrowding had increased. Since 1935 13,014 families in the Division have been accommodated in Corporation houses suitable for their needs.

Housing Survey.—A survey of all residential property, including each house, was started late in the year 1948. The survey was carried on in succeeding years depending upon staffing contingencies and at the end of 1952 5,461 properties containing 43,487 houses were dealt with. This represented 62·9 per cent. of the dwellings in the Division. Unfortunately because of staffing difficulties no progress has been made with the survey during the year under review. The information obtained during the survey and recorded in specially prepared cards has been of great value in assessing the standard of housing in the wards that have been completed. A summary (amended) of conditions found at the time of this survey is given in the following table :—

SUMMARY OF CONDITIONS FOUND BY HOUSING SURVEY (AMENDED).

Ward		Popu- lation	No. of Houses	Acreage	Density		No. of Unsatisfactory Houses	
					Persons per Acre	Houses per Acre		
8.	Cowlairs ...	27,309	8,111	645	42	11	4,288	52·9%
10.	Townhead ...	33,753	9,708	301	112	32	6,206	63·9%
14.	Cowcaddens...	25,957	7,533	488	53	15	5,794	76·9%
15.	Woodside ...	25,081	7,471	170	148	44	5,279	72·0%
18.	Maryhill ...	25,273	7,483	2,210	11	3	2,424	32·4%

Rent Restrictions Acts.—Two hundred and fifty-one applications for certificates of disrepair in dwellinghouses were reported upon and of these 190 were granted, 60 refused and 1 withdrawn. Three applications for reports on work having been satisfactorily completed were granted to owners.

Supervision of Rehousing Schemes.—Between the years 1935 and 1939, 5,247 houses were built specially for rehousing families displaced by slum clearance. Since that time no special provision has been made for rehousing the slum dwellers until the 156 houses completed during the year were built in the Royston Road Area. It has been the policy of the Corporation to transfer as many of the tenants originally rehoused in these special schemes to Intermediate or Ordinary Schemes and make available the vacated houses for other families who require the supervision of the Housing Nurse. It is to the credit of the nurses that since 1950 966 families have been transferred to schemes where no further supervision is required. During 1953, 31,419 visits have been made to the houses in the various rehousing schemes and at the request of the City Factor 174 visits to Intermediate and Ordinary Schemes.

On 16,464 occasions houses were found to be satisfactory, on 14,927 occasions they were found to be fair, and only on 202 occasions were houses found dirty. Only on 15 occasions were houses found to be infested with bugs. At the request of the City Factor the Nurses reported on 143 applications by tenants for transfer to higher rented houses in Ordinary Schemes. Of these, 140 were reported as being suitable for transfer.

Inspection of School Children.—This duty is the divided responsibility of the nurses engaged by this Department and those of the Education Department. There are 34 schools with a total of 25,000 scholars on the Rolls, which the nurses in the Division visit twice a year for routine inspection.

During 1953, 18,762 boys and 16,134 girls were examined for vermin and cleanliness.

Boys found infested (pediculus capitis)	...	...	...	29
Boys found infected (nits only)	...	...	...	3,061
Girls found infested (pediculus capitis)	...	...	...	92
Girls found infected (nits only)	...	...	...	6,824

There were 167 boys and 58 girls with fleas and 286 boys and 70 girls dirty in body and clothing. The homes of 1,205 of the children were visited and the parents advised how to deal with the conditions found. In many instances the first indication the Department has that home conditions are unsatisfactory is when the children are found at school in a verminous and dirty state. For this reason it is desirable that the new schools in the housing areas should be visited by the nurses. At present this is impracticable because of staffing difficulties.

In addition to her duties of visiting rehousing schemes and schools, the nurse-inspectress is from time to time required to investigate and report upon the condition of elderly people living alone and in need of care and attention. During the year 28 aged persons were visited and much needed assistance given to those old people who were found to be living in unsatisfactory conditions.

Sanitation.—All houses with the exception of 30 have an internal water supply fitted at a sink. Forty-one thousand households have an internal water-closet and 28,417 households share a water-closet in common (see page 257). Forty-two pan privies are still in use

where drainage to a sewer is impracticable. Twenty-six thousand households have use of a fixed bath. Refuse disposal is by individual or shared bins housed in shelters situated in the common court.

WATER CLOSETS USED IN COMMON.

Ward	Common to—				Total
	2 Tenants	3 Tenants	4 Tenants	5+ Tenants	
8	395	867	233	18	1,513
9	199	477	111	15	802
10	441	645	389	83	1,558
14	370	922	297	91	1,680
15	181	736	269	120	1,306
16	129	223	128	5	485
17	88	902	171	18	1,179
18	144	531	108	8	791
Totals	<u>1,947</u>	<u>5,303</u>	<u>1,706</u>	<u>358</u>	<u>9,314</u>

JOHN D. ARTON,
Divisional Sanitary Inspector.

EASTERN DIVISION

As in former years difficulties are still being experienced in attempting to maintain old and worn-out properties in a fair state of repair. Where properties have been acquired by the Corporation and appropriate rents charged, repairs made to the structure have added to their estimated life and may help to ease the housing situation. A number of properties are being abandoned by factors and owners which necessitates the removal of nuisances by the Local Authority and although the tenants pay no rent an attempt is made to collect occupiers' rates. In these properties demands for extensive repairs are frequent, but so far as is practicable only essential public health nuisances are dealt with.

It is now obvious that only strict attention to maintenance repairs can prevent many properties falling into a state where demolition is the only remedy. Whether or not the proposed new legislation will prevent this is a matter for conjecture.

The number of houses built in the division during the year was 3,386, which is a marked increase over previous years and three times the 1952 figure. The building of housing schemes on the outskirts of the division entails much additional work and travelling by the inspectorial staff, and on many occasions the inspector has to travel a distance of up to ten miles in order to book a case of infectious disease or investigate a nuisance complaint.

During the year 2,545 families were rehoused in Corporation houses and regarding the inspection and supervision of the furnishings prior to removal, 3,815 visits were made. It is interesting to note that these visits showed that 1,566 houses were overcrowded prior to rehousing. At a later date the houses vacated were visited and it was found that of the incoming or new tenants 350 were overcrowded at date of entry. The percentage overcrowded, namely 22·35, is much higher than that of the previous year.

Housing.—The total number of houses in the division at December, 1953, is 65,005 and of these 29,143 have inside bath and water closet. This represents 44·83 per cent. of the total, an increase of 2·58 per cent. over the previous year. Sixteen houses were represented to the Local Authority as being unfit for human habitation in terms of the Housing (Scotland) Act, 1950, and of these 14 were demolished and 2 were closed. Six properties classified as dangerous by the Master of Works and containing 89 houses were demolished.

Sanitary Conveniences Used in Common.—Due mainly to the demolition of properties the number of water closets used in common shows a slight decrease to 9,386. There are 53 privies and one privy midden ; showing no change from last year. Common ash-pits serving dwelling-houses remain at 19 and the number of houses with outside sink and water supply remains unchanged at 65.

Rent Restriction Certificates.—There were 79 applications for certificates in terms of the Rent Restrictions Acts, of which 50 were granted and 25 refused. One application was held over until 1954 and three applications were cancelled by the applicants.

Septic Tanks.—There has been a slight increase in the number of septic tank installations in the rural areas, principally due to erections of piggeries or additions to the existing piggeries.

Squatters.—The number of squatter families has increased from 16 to 17, although changes have taken place in the occupying families. Two families who took over a single-storey four-apartment house were compelled to leave in December. One squatter family who refused to cleanse the common water closet was taken to task by the inspector and it is interesting to note the sequel. The husband thanked the inspector for being firm with him regarding the cleansing and stated that he had been getting into a rut and was now resolved to improve himself. I am pleased to say that he has done so and is now a model of cleanliness.

Piggeries.—There are 56 piggeries in the city licensed for a total of 12,883 pigs and during the year 327 visits were made. With the exception of one piggery no difficulties were experienced in the removal of any matters contravening the byelaws. The piggery referred to was reconstructed without the sanction of the Local Authority and when inspected by the Master of Works and myself it was found that the drains were discharging directly into a piped burn. The owner was notified to connect to a main sewer, and to his consternation found that the piggery had been built below the level of the sewer. It was necessary to instal a pump to raise the sewage from the piggery drains to a settling tank from which the liquid flowed by gravitation to the sewer. This state of affairs would not have arisen if he had first applied for planning permission.

An annual complaint associated with the disposal of pig manure has again occurred in the Drumchapel area. Residents of houses which are adjacent to arable land treated with pig manure complained of the obnoxious odours, but little can be done about this as the land must be manured. The smells generally dissipate within a day or so.

When plans of proposed new piggeries are submitted, opportunity is taken to secure the best possible conditions in the circumstances. In rural areas it is considered advisable to have septic tanks with up and down flow in three chambers in order to secure the maximum precipitation of offensive solid matters in suspension. Filters in piggery drainage systems require continual attention and removal of grosser matters in the tanks alleviates chokeage of the filter bed.

Offensive Trades.—There are 48 offensive trades in the city comprised as follows :—

Blood Boiler	...	...	...	1	Manure Manufacturer	...	3
Bone Boiler	...	...	...	7	Soap Boiler	...	3
Glue and Size Maker			...	1	Tallow Melter	...	13
Gut Cleaner	...	...	...	3	Tanner	...	10
Hide and Skin Factor			...	4	Knacker	...	1
Tripe Boiler	...	...	...	1	Horse Slaughterer	...	1

Two applications for sanction to establish the business of bone boiling were received during the year. One was granted by the Corporation after considerable enquiry and visits to the site ; the other was refused and the applicant appealed to the Secretary of State against the decision. Throughout the year 422 visits were made to the various factories and suggestions to the management have resulted in an improvement in certain businesses which are most liable to give offence.

Where a boiling process follows part of the manufacture the hot vapours or effluvia if not properly treated will escape into the atmosphere and give rise to complaints of smells. The businesses which are most likely to offend in this respect are bone boilers, blood boilers and tallow melters. There are, however, means by which the offensiveness of the effluvium arising from the boiling process in such places can be considerably mitigated by treatment. The effluvium is conducted through pipes from the digestors where the boiling is done, to a water condenser where the soluble vapour is taken up by the water and run off in a cold state to a drain, and the insoluble vapour is conducted in a similar fashion to a Chlorinating tower where it is neutralised by a chlorine solution.

During the summer months the external and internal walls of these premises are sprayed with a D.D.T. solution which very effectively controls fly infestation. Rat trappers from this Department are given a free hand to ensure that the premises are more or less free of vermin at all times.

Nurse Inspectors.—Nurse inspectors carried out 34,017 visits to rehousing schemes, and found 16,198 houses in a fair condition and 811 in a dirty condition. Dirty bedding was found in 89 cases and bug infestation in 37 houses. In remedying these matters, 1,153 revisits were made and written notices were required in 674 cases. All were satisfactorily dealt with without recourse to legal proceedings which is an indication of the experienced staff dealing with these matters and of the tactful and helpful ways in which the service functions. In 39 visits to Intermediate Scheme houses only one was found dirty.

During the year 429 visits were made to schools and 31,410 children were examined ; 238 were found to be infested, 4,734 were infected, and the presence of fleas was found on 142 children. In 175 cases notices were served and all children were cleansed by their parents, so that no action was necessary by the Local Authority.

Follow-up visits numbering 1,558 were carried out in connection with the above and disclosed four houses in a dirty condition and two cases of dirty bedding.

Elderly Persons.—Throughout the year a number of cases of elderly persons requiring care and attention were brought to the notice of the Department. Many of these elderly people, although in straitened circumstances, are proud and resent interference in their home life. In such cases the sympathetic and understanding approach of our nurse inspectors has been of great assistance in having the person and the house cleansed where necessary. Compassionate washings for bed, bedding and personal clothing have been undertaken by this Department and a cleaner from the office has occasionally been sent to cleanse the house and furnishings.

The help given to these people in their homes in their times of need cannot be assessed on a monetary basis, but the appreciation and thanks and good results following these visits show that the kindly touch in the time of need far exceeds that which would result from a strictly official visit by an inspector with a demand that the house be cleansed.

Twenty-nine such houses were visited throughout the year by the nurse inspectors, in addition to visits made by the assistant sanitary inspectors.

ALEXANDER EASTON,
Divisional Sanitary Inspector.

SOUTH-EASTERN DIVISION

The Division extends to 8,246 of the City's total acreage of 39,725. From the north boundary, south of the River Clyde, its character changes from the densely populated inner wards, through the substantially built tenemental areas of the middle wards to rural and semi-rural suburbs forming the outer wings. The Western wing extending beyond Nitshill and largely built over by the housing estates of South Pollok and Priesthill, is rapidly reaching building saturation point.

Preparatory work for the new housing estate of Castlemilk on the eastern wing is well under way. This estate, which will contain some 8,000 houses is situated in a wooded district standing high above the City and commanding a vista of the Clyde Valley and the mountain peaks to the north. Engineering skill has made possible the supply of gravitation water at the highest point by the construction of two high level reservoirs with pumping machinery to maintain a constant supply.

Some advance in the number of houses subject to closing orders and demolition orders in terms of Section 9 of the Housing (Scotland) Act, 1950, was made during the year. The availability of alternative housing accommodation determines, to a large extent, the number of representations to be made. The rehousing of tenants from properties declared dangerous by the Master of Works also reduces the available accommodation.

The housing activity was mainly concentrated in the Gorbals ward where, in addition to the inauguration of three small clearance areas, several properties were subject to closing and demolition orders.

The considerable delay in rehousing the tenants from condemned properties adds to maintenance difficulties. Many proprietors are unwilling to spend money to remove gross nuisances in properties from which no financial return is received.

From time to time selected properties in the Gorbals ward are featured pictorially in the daily press and periodicals. These publications stigmatise rather than assist the people living in this area. To the uninformed they give the erroneous impression of areas of squalid wretchedness, where families share their rain sodden hovels with rats and bugs. In fact, the Gorbals ward is a typical working class area, populated by a cosmopolitan mixture of race and creed; where the menfolk are industrious and the women possessed of that indomitable courage which is required to rear families in over-crowded houses

with no baths or hot water supply and an outside water-closet used in common. Like every other community it has its percentage of irresponsibles.

There are rats, encouraged no doubt by the unsocial habits of the few of throwing refuse and scraps of food over windows on to courts. Such infestations are treated by the Department's Rodent Control Section. The number of bug-infested houses reported has fallen considerably during the last few years as the result of the concentrated efforts of the Disinfestation Unit.

The vast majority of the houses are sub-standard and the amount of disrepair and the number of sanitary defects arising depend to a large extent on the degree of maintenance applied. Like other districts in the city vandalism occurs, particularly to outside fittings for use in common. From time to time water pipes burst, drains choke, and roofs leak. When these and other insanitary conditions arise, every effort is made by the inspectorial staff to have them remedied with the minimum delay. Some discomfort, however, is experienced by the occupiers of the houses during the interval.

The Gorbals ward, which lies immediately south of the River Clyde east of Bridge Street and Eglinton Street, covers 252 acres. It is contiguous with Hutchesontown ward which has an area of 387 acres. The combined wards form the greater part of Gorbals Parliamentary Division. With few exceptions the streets are wide and airy. All are well paved and well lighted.

The comparison shown below of the years 1930 and 1952 indicates that progress is being made :—

GORBALS					HUTCHESONTOWN		
	Population	Inhabited Houses	Persons per Acre		Population	Inhabited Houses	Persons per Acre
1930	... 44,643	10,381	180		39,982	9,627	100
1952	... 34,993	9,249	139		30,408	9,558*	79

* Includes 144 houses built by the Corporation.

NUMBER AND SIZES OF HOUSES AS AT 1953.

Ward			1 Apt.	2 Apts.	3 Apts.	4+ Apts.	Total
Gorbals	...	...	1,410	4,220	2,447	1,098	9,287
Hutchesontown	...	...	3,113	5,446	981	34	9,574
Total	...	...	4,523	9,666	3,428	1,132	18,749

From the departmental records the following table shows the disposition of families rehoused from the application list of the City Factor from 1st January, 1930, to 31st December, 1952 :—

No. in Family	GORBALS WARD		HUTCHESONTOWN WARD	
	No. of Families	No. of Persons	No. of Families	No. of Persons
1	8	8	7	7
2	29	58	34	68
3	102	306	147	441
4	241	964	439	1,756
5	336	1,680	545	2,725
6	338	2,028	376	2,256
7	214	1,498	261	1,827
8	135	1,080	113	904
9	72	648	46	414
10	74	740	37	370
	<u>1,549</u>	<u>9,010</u>	<u>2,005</u>	<u>10,768</u>

In Gorbals, with an average of 9,600 houses over this period, it represents the rehousing of 16 in every 100 tenants and 25 in every 100 persons ; and in Hutchesontown, with an average of 9,500 houses and a population of 34,000, it represents the rehousing of 21 in every 100 tenants and of 35 persons in every 100.

In addition, the number of families in the Division rehoused from the application list during 1953 was 903. Of this number, 245 were from Gorbals and 294 from Hutchesontown, which together represents 59·8 per cent. of the Divisional total.

This means, therefore, excluding the removals from condemned houses, that 4,093 families with a total population of 21,934 persons have been rehoused from this area by the City Factor since 1930.

A complete survey of all the houses in the two wards was carried out and classified as follows :—

Ward	Standard Houses	Sub-standard Houses	Unfit Houses	Total
Gorbals	544	7,269	1,474	9,287
Hutchesontown	449	8,740	385	9,574

From 1930 onwards no large scale slum clearance operations were undertaken, but many individual properties throughout the area were closed and demolished in terms of the Housing Acts, and a number of properties were demolished as dangerous by the Master of Works. The following table shows the extent of this work :—

Year	GORBALS			HUTCHESTOWN			Total
	Demolished	Medical Officer of Health Closed	Master of Works	Demolished	Medical Officer of Health Closed	Master of Works	
1930-31	...	—	—	50	—	—	50
1932-35	...	453	39	13	37	7	549
1936-40	...	211	2	51	12	—	282
1941-45	...	34	—	20	—	—	54
1946-50	...	91	21	106	31	2	251
1951-52	...	88	—	90	—	—	247
1953	...	31	68	13	22	—	162
Total	...	<u>908</u>	<u>130</u>	<u>293</u>	<u>152</u>	<u>9</u>	<u>1,595</u>

In addition to the permissible number of demolitions and closures by representation during the year, a small clearance area in the Gorbals ward was inaugurated. It was the first clearance order promoted by the Corporation since 1937 and created considerable public interest. Three clearance orders were made within the hollow square bounded by Commercial Road, Ballater Street, Lawmoor Street and Rutherglen Road, and were designated Gorbals (Commercial Road), Clearance Areas I, II and III, Compulsory Purchase Orders, 1953. Several small business premises were within the areas.

Rent Restrictions Acts.—During the year 106 applications were received for certificates in terms of the Rent Restrictions Acts. Twenty-seven were granted, 63 refused, and 15 withdrawn. Eight were brought forward from 1953, and nine were carried forward to 1954. Applications for discharge certificates were received in three instances. All were granted.

Abandoned Properties.—The abandoned properties in the Division now total eight plus three individual houses. Nuisances are removed and a minimum of essential repair carried out to maintain the houses in a reasonably habitable condition.

From time to time properties are offered to the Corporation free of price or for a nominal sum. Not all require an extensive overhaul but a considerable amount of minor disrepair existed in the vast majority. The number of such properties acquired within recent years is thirteen with three awaiting the outcome of negotiations.

Burns and Streams.—Efforts to remedy the pollution and unsatisfactory condition of the Mallsmire and Polmadie Burns were continued during the year. It was evident from periodic observations that the level of the ponded water in the low-lying vacant ground to the south-west of the railway embankment had subsided by approximately five feet. This may have been due to the head of water forcing an opening through the choked culvert under the railway embankment, or it may be that the water had found a new passage through. The volume of water escaping from the north-east side of the embankment had increased considerably during the year, and it was noted that the point of emergence was some feet distant from the culvert outlet.

The matter was brought to the attention of the Health Committee and a Sub-Committee appointed to consider it. Along with other departmental officials interested they inspected the burn at several points throughout its course towards the end of the year. As a preliminary step the Sub-Committee agreed to instruct the City Engineer to ascertain levels and the cost of cleaning the burn from the outlet of the culvert to the confluence of the Westburn. On submission of the City Engineer's report the Sub-Committee will consider future action.

There are five points in the length of the water course which require attention as follows :—

- (1) The stretch from Rutherglen Bridge at Richmond Park to the north-east side of the British Railway embankment, near Polmadie engine sheds, requires to be cleaned and regraded.
- (2) The culvert under the railway embankment should be cleared to allow the large stretch of impounded water on the south-west side to be released.
- (3) The two private sewers (Jessie Street and Calder Street) which enter the water course should be diverted.
- (4) The ponding of the water south of Prospecthill Road Bridge.
- (5) Tracing the source of effluent from the sewer discharging into the water course at its origin adjacent to Curtis Avenue, and consider the discontinuance of the two storm overflows in the same location.

The remedy would be to discontinue the use of the burn for sewer overflows and divert each sewage discharge pipe to a location where entry to a sewer is possible. By doing so the burn from its origin at Curtis Avenue to its confluence with the Westburn would dry up. The ponded area could then be infilled and the land reclaimed.

Engineering difficulties will have to be overcome and agreement reached between riparian proprietors before this nuisance of many years standing can be remedied.

General Nuisances.—In this connection the work of inspection and the removal of nuisances continued with customary thoroughness, the details of which are given in Table XVI of the Appendix. Once again the difficulty of having nuisances removed expeditiously must be mentioned. The delay results in many unnecessary visits and telephone calls by the district inspectors. The number of inspections made was 68,768 and the nuisances notified and removed were 5,367. In terms of Section 20 of the Public Health (Scotland) Act, 1897, seventy statutory notices were issued to proprietors of property who failed to remove nuisances within a reasonable time after receipt of intimations. In six instances it was found necessary to take legal proceedings in the Sheriff Court against proprietors for failing to remove nuisances.

In three cases the work was subsequently carried out by private contractors. One roof was completely overhauled by the Corporation at a cost of £307 12s. In another the work was started by private contractors but unfinished; the Corporation was authorised to complete the repairs. One case was continued into 1954. In all cases expenses were awarded to the Corporation.

A summary of the complaints received and their distribution in the wards can be seen in the following analysis :—

		Municipal Wards											
							33						
						35	35	33	36			36	
		26			25	36	36	34	37	37	34	Total	
		Districts											
		1	2	3	4	5	6	7	8	9	10		
Choked drains	...	95	65	75	121	59	53	35	36	35	10	584	
Dirty closes and stairs	...	88	63	36	57	20	55	24	27	14	16	400	
Disrepair in houses	...	157	134	222	209	69	85	66	39	45	30	1,056	
Factories Act	...	3	4	4	3	2	5	7	10	14	10	62	
Offensive smells	...	12	21	20	23	16	37	13	20	8	5	175	
Defective roofs	...	66	45	41	50	45	22	2	10	10	4	295	
Smoke pollution	...	41	36	58	74	71	40	13	13	10	2	358	
Dirty houses	...	8	2	1	2	6	7	3	1	—	1	31	
Painting and lime-washing closes	...	1	—	1	3	—	15	6	12	—	—	38	
Housing complaints	...	35	25	28	22	7	16	18	9	15	12	187	
Insect infestation	...	45	51	69	63	22	35	16	5	5	6	317	
Police offences	...	5	3	—	5	—	2	3	4	5	6	33	
Miscellaneous	...	18	5	17	21	17	1	—	—	—	—	79	
Total	...	574	454	572	653	334	373	206	186	161	102	3,615	

Stable Dung Pits.—There are now only 29 stable premises in the division with a total of 24 dung pits. No nuisance was recorded during the year, and the dung pits were sprayed regularly by the Department's operators.

Piggeries.—The number of licensed piggeries remains at nine with accommodation for 364 pigs.

Nurse Inspectors.—The work of the Nurse Inspectors in the City cannot be valued statistically. Their visits are a source of comfort in the homes of the less fortunate and they assist in the maintenance of a reasonable standard of housekeeping by the "fair" class in the housing schemes under supervision. Tact and firmness with an understanding nature are qualities necessary to those engaged in this work. There are few who do not respond to guidance or kindness, but there are always the incorrigibles with whom little can be done.

Of the 8,739 visits to houses during the year, 24 were found to be dirty and 463 classed as "fair." Seven notices were issued to defaulters and conditions were satisfactorily improved without recourse to further action.

In connection with the inspection of school children, 117 visits were made to schools during which 9,841 children were examined. The number of children found to be infested was 142, which is a considerable decrease from last year; 1,283 children were found to be infected to a lesser degree, an increase from last year. One hundred and one children were dirty. It was considered necessary to send written notices to the parents of 298 children. 3,698 children were re-examined after being cleaned by parents. A follow-up visit to the homes of 397 children found unsatisfactory was made and the parents warned and instructed in methods of personal hygiene.

During the year 477 visits were made to the homes of the aged and infirm, and in three cases the Department's cleaners were called in to render assistance where the conditions were found to be very unsatisfactory. Periodic compassionate washings were given to 23 deserving cases.

WILLIAM RAE,
Divisional Sanitary Inspector.

SOUTH-WESTERN DIVISION

Sanitary conditions in the Division were maintained at the highest possible level during the year in spite of the difficulties encountered in having the necessary repairs carried out in the steadily deteriorating older type of tenemental property. Many properties thought to be good for a number of years yet only require a moderate wind to show defective roofs and damaged chimney-heads. The factors and owners of these properties state that they cannot afford such major repairs in addition to the general maintenance of the property. Several properties were added to the "abandoned" list. A number of others were offered to the Local Authority either at a price or free, and generally they were in need of extensive repair.

The area of the Division extends to 7,402 acres with an estimated population of 193,866 persons, giving an average density of 26 persons per acre against the City's 27. The 27th (Kingston) Ward has the highest density with 73 persons per acre, and the 32nd (Pollokshields) Ward the lowest with 9 persons per acre. These figures reveal an increase in the population of over 30,000 persons during the past twenty years. This can be accounted for by the completion of several housing schemes in the Division, including Pollok.

The following table shows the distribution and size of houses in each Ward in the Division :—

Ward	Apartments			Totals
	1	2	3 and over	
27	1,187	3,373	2,812	7,372
28	1,056	4,279	2,925	8,260
29	1,227	4,737	3,083	9,047
30	621	3,127	2,998	6,746
31	36	150	10,540	10,726
32	295	282	8,998	9,575
Totals	<u>4,422</u>	<u>15,948</u>	<u>31,356</u>	<u>51,726</u>

The population is mainly working class, and the majority find employment within the Division in its 805 factories and 2,221 shops.

During the year 109,793 visits were made in the course of investigating infectious disease and nuisances and for the enforcement of the various statutes to ensure that the environmental conditions were maintained at a high level.

Complaints received numbered 2,396, and were all promptly investigated and appropriate action taken.

Little progress has been made during the year with the Housing Survey due to lack of staff.

Nuisance Detection and Removal.—The unspectacular work of nuisance detection and removal often gives rise to problems which call for much investigation and application of the inspectors' technical knowledge. The volume of work under this heading tends to remain relatively stationary. The figures of 77,952 visits and 13,247 nuisances remedied show little change from the previous year. Defective sanitary fittings, general disrepair and defective roofs head the list of nuisance conditions dealt with.

Under Section 20 of the Public Health Act, 44 statutory notices under Section 20 of the Public Health Act were issued during the year, a decrease of 18 from last year. Court proceedings were necessary on 6 occasions to remove nuisance conditions, as many owners of property are unable or reluctant to carry out repairs even of a minor nature.

The undernoted table shows the decisions in the cases held over from 1952 and how those brought before the Court during the current year were dealt with :—

Address	Nuisance	Decision
1952—		
78 Blackburn Street	Defective property roof	Owner now dead. Case dropped at request of Town Clerk. Factor later carried out repairs.
138 Kintra Street ...	Defective property roof	£12 12s. 0d. expenses.
158 Houston Street	Defective property roof	£8 8s. 0d. expenses.
46 Plantation Street	Defective vent ...	£6 6s. 0d. expenses.
1953—		
95 Kingston Street	Defective waste pipe ...	£5 5s. 0d. expenses.
55 Nethan Street ...	Defective soil pipe ...	} Repairs completed, no expenses.
71 Nethan Street ...	Defective soil pipe ...	
73 Nethan Street ...	Defective waste pipe ...	
3 Burndyke Street	Defective property roof and general disrepair.	Corporation to do repairs estimated at about £800 (case not completed).
15 Copland Road ...	Defective property roof	Case not disposed of.

Drainage.—Visits in this connection numbered 2,563 and involved 422 Dean of Guild Tests, 14 of which were on old properties after alterations had been carried out.

Rodent Control.—An increase in the number of complaints of rodent infestation necessitated more visits and time on investigation. During the year 2,950 visits were made and the known kill was 2,031 rats and 201 mice ; details are given in the following table :—

RODENT CONTROL OPERATIONS UNDERTAKEN DURING 1953.

Type of Premises	No. Visited	No. of Premises found Infested	Type of Infestation			Rodents Destroyed		No. of Visits made <i>re</i> Trapping and Proofing	No. Proofed to satisfaction of Department
			Light	Reser-voir	Major	Rats	Mice		
Dwelling Houses, Basement Cellars, Back Courts ...	249	139	131	2	6	691	86	1,096	38
Offices and Institutions ...	2	1	1	—	—	33	—	23	1
Food Factories ...	4	2	—	2	—	14	100	19	—
Food Shops ...	17	17	13	—	4	184	5	195	10
General Factories ...	19	19	14	3	2	412	—	162	3
General Shops ...	28	17	16	—	1	107	10	164	7
Sewers ...	2	2	—	2	—	94	—	26	—
Restaurants ...	2	2	2	—	—	31	—	25	2
Railway Embankments and Signal Boxes ...	4	4	—	4	—	260	—	41	—
Offensive Trades ...	1	1	1	—	—	14	—	9	—
Gardens (Parks' Department) ...	1	1	—	1	—	20	—	6	—
School Building Sites ...	2	2	1	—	1	171	—	26	1
Total ...	331	207	179	14	14	2,031	201	1,792	62

Limewashing, etc., of Common Passages, Stairs and Water Closets.—This section of the inspector's work is important, not only from the hygienic side but, as stressed in previous reports, because it adds to the amenities and has a stimulating effect on the tenants.

During 1953, 6,035 visits were made to the properties, 558 notices were issued and 1,016 properties cleansed, including 584 done voluntarily by owners.

Common Stairs and Passages.—The enforcement of the byelaws relative to the above takes up a considerable part of the staff's time. Numerous complaints reach the Department from tenants regarding neighbours neglecting their turn, and only the tact of the inspector prevents many stairhead rows.

3,497 visits were made and 1,467 rotation cards were issued.

It was found necessary to institute proceedings in 5 instances where persistent refusal to comply with the byelaws was met with. Penalties totalling £2 5s. were imposed on the offenders.

Factories—Mechanical and Non-Mechanical.—Improved conditions in sanitation, hygiene, welfare, canteen, hours and wages have only been gained after many hard struggles during the past 150 years. Today, in the city, every factory, large and small, is inspected several times per year, and all nuisance conditions brought to the notice of the management with a request for speedy attention.

Since the introduction of the 1937 Act and the Sanitary accommodation Regulations, 1938, there has been a steady improvement in the standard of hygiene, especially in the larger type of factory. During the past fifteen years many changes have been made in sanitary matters. The old trough type urinals and closets have been gradually replaced with modern fittings, and with the advent of female labour during the war separate conveniences, canteen rest rooms, etc., were introduced.

The importance of sanitation in factories should not be underestimated, and public health workers are well aware that conditions in many factories are still detrimental to the health of the employees.

During the year 178 new factories were established in the City giving a total of 4,576 mechanical and 642 non-mechanical factories on the register at 31.12.53.

Rent Restriction Acts.—There was a further increase in the number of applications for certificates of disrepair during the year. Of the 111 applications, 77 were granted and 34 refused. Eight applications for reports were made on behalf of owners, and on each occasion the application was granted when it was found that the disrepair had been satisfactorily remedied.

HOUSING.

Overcrowding.—In terms of the Housing (Scotland) Act, 1950, 561 overcrowded families, involving 3,032 persons or 2,579½ units were rehoused in the course of the year. Subsequent visits to the old houses revealed that overcrowding in 450 cases was abated, 67 reduced,

21 unchanged and 23 increased. The number of houses again overcrowded was 111 (19.78 per cent.).

In addition, 505 families not overcrowded were rehoused. In most cases these families were transferred from one Corporation house to another.

The number of new houses constructed in the Division during the year was 366, of which 356 were in housing schemes and 10 by subdivision of large existing houses. The schemes completed are Bellahouston (Ladykirk Drive, Extension) and Roughmussel.

There were 107 houses closed and/or demolished (shown in tabular form below) and the nett gain of houses in the Division at the end of the year was 259.

Address	Size of Houses				Total	Reason for Demolition and/or Closing
	1 Apt.	2 Apts.	3 Apts.	4+ Apts.		
218 Centre Street (Front Land)	1	11	3	—	15	Dangerous Building.
75 Lambhill Street	3	7	—	—	10	Dangerous Building.
41 Orkney Street ...	—	13	—	—	13	Dangerous Building.
105 Neptune Street ...	—	10	—	—	10	Dangerous Building.
120/124 Vicarfield St.	—	14	—	—	14	Dangerous Building.
113/117 Neptune St.	1	13	—	—	14	Dangerous Building.
27 Nethan Street ...	8	12	—	—	20	Dangerous Building.
90 Harmony Row ...	—	—	2	—	2	Dangerous Building.
207 Centre Street ...	1	—	—	—	1	Absorbed into Factory Premises.
227 Centre Street ...	1	—	—	—	1	Absorbed into Factory Premises.
84 Neptune Street ...	—	1	—	—	1	Absorbed into Draper's Premises.
33 Robert Street ...	1	—	—	—	1	Ground flat house—Abandoned property
39 Robert Street ...	1	—	—	—	1	Ground flat house—Abandoned property
631 Paisley Road West ...	—	—	—	1	1	" Westbourne House " Extensively affected by dry rot.
15 St. John's Road	—	—	—	1	1	Converted for use as an aged persons' hostel.
107 St. Andrew's Dr.	—	—	—	1	1	Converted for use as a children's home.
357 Pollokshaws Rd.	1	—	—	—	1	Absorbed into Shop No. 359 Pollokshaws Road.
	<u>18</u>	<u>81</u>	<u>5</u>	<u>3</u>	<u>107</u>	

Rag Flock.—During the year 187 visits were made to the 16 licensed and 95 registered premises in the City. Four samples were submitted for analysis and found to conform with the standards laid down in the Regulations.

Other Premises.—Lack of staff is preventing full sanitary jurisdiction over many sections of the work, but periodic inspections were made of the following, and where nuisance conditions were found attention was drawn to them and they were speedily attended to :—Tents, vans and sheds, brokers, houses let in lodgings, public baths, piggeries, common lodging houses, squatters, catering establishments, places of public entertainment, home-workers, septic tanks, water storage tanks, offensive trades, and stables and dungpits.

Shops.—Great changes have taken place in the mode of occupancy in shops during the past twenty years. It was commonplace for many small shops to sell food for human consumption and at the same time sell paraffin oil and other materials likely to contaminate eatables. Fortunately, in this more enlightened age this type of shop is practically non-existent, and we have instead the specialist—dairy, butcher, grocer, confectioner, baker, draper, newsagent, hardware, etc. The public are becoming “shop conscious” and, generally speaking, patronise the well-kept, clean and bright business with assistants in the same class. The improved standard of hygiene in shops is due in no small measure to modern legislation and the help, guidance and supervision of the local sanitary authority.

During the year, 2,180 visits were made to the 16,506 shop premises in the City.

Supervision of Rehousing Scheme Houses.—The duties imposed on the Local Authorities under the Housing Acts in respect of cleanliness and general supervision were again ably carried out by the Nurse Inspectors.

Of the 7,215 houses inspected, 6,259 were found clean and 951 fair. Five houses were found to be dirty and one had bugs. These figures are remarkable, and, as so many tenants came originally from bug infested and slum property, show the patience, tact and understanding necessary to produce them.

Inspection of School Children.—The schools for which the Division is responsible were visited on 72 occasions, and 5,290 boys and 4,462 girls were examined with the following result :—

Boys found infested	...	...	...	...	1
and infected (nits only)	...	...	...	...	316
Girls found infested	...	...	...	...	2
and infected (nits only)	...	...	...	...	669

In the follow up of “home after school visitation” advice on decontamination, cleanliness and prevention against re-infestation was given to the parents.

W. B. EASTON
Divisional Sanitary Inspector.

RODENT CONTROL OPERATIONS.

The necessary but unspectacular work of the Rodent Control Section continued efficiently throughout the year. As in former years, the operators were distributed divisionally, but a mutual arrangement exists whereby they are transferable to any division when assistance is required. There are nine operators engaged as follows :—

Central Division	...	...	...	...	3
Northern Division	...	...	...	...	2
Eastern Division	...	...	...	...	1
South-Eastern Division	...	...	...	...	2
South-Western Division	...	...	...	...	1

In offering this service we are assisting the community in three ways—(1) by helping to reduce the enormous annual wastage of food as a result of fouling by rats and mice ; (2) by reducing the structural damage to property due to gnawing of woodwork and service conduits and undermining of foundations ; and (3) by preventing the spread of diseases which may be carried by rats and mice.

It is a well established fact that in addition to destroying merchandise in this country to the value of millions of pounds rats foul bulk supplies of food by solid and liquid excrement whereby food becomes tainted and unfit for human consumption. In terms of the Pests Destruction Act, 1947, there is a legal obligation on the occupiers of premises to take all practicable steps to destroy rats and mice. This provision should be rigidly enforced.

The recent outstanding feature of rodent control work was the emergence of the anti-coagulants as the principal method of extermination. They have almost completely displaced trapping and orthodox poisons. Owing to the complete stoppage of supplies of " Tomorin," the tracking powder used experimentally and of which details were given in the report of the Central Division last year, it was decided to change over to a bait-type anti-coagulant, " Warfarin." This is a comparatively new poison. Small quantities fed to rodents cause internal haemorrhage and death. The effect is gradual and there appears to be no bait shyness. Rats have been observed eating the bait while in a dying condition. Death ensues between the 5th and 8th day.

One disadvantage of this poison is that the number of bodies recovered is fewer with a consequent increase in the number of " corpse odour " complaints. It is felt, however, that the results achieved justify the continuance of this method of extermination. The use of a deodorant will neutralise the temporary unpleasant smell. The poison is mixed with a base bait such as oatmeal or rusk and laid in containers at strategic points.

Large kills in individual properties are now the exception rather than the rule and few were reported during the year. The credit for this is in no small measure due to the operators and supervisory staff in eliminating the reservoirs of infestation common in the city within recent years. The rat population would be reduced even further if all proprietors would render their properties vermin-proof and reduce the indoor harbourage essential to rats in a built-up area. Many proprietors spend considerable sums proofing their properties. There are, however, some who are of the belief that rats and their type of business are inseparable, and only admit the presence of vermin when the damage done results in financial loss.

The biggest kills were, as usual, in the offensive trade establishments, piggeries and kindred businesses, where feeding is plentiful and proofing impracticable, owing to burrowing in the surrounding areas of open ground. In one piggery adjacent to a new housing estate in the East end of the town 600 rats were killed in one treatment during the year. In this case, it was believed that the considerable increase in the number of rats followed the demolition of workmen's huts and the occupation of the houses. In another case, 117 rats were killed in a warehouse in the centre of the city. Here extensive proofing work was carried out to prevent re-infestation.

In the South-Eastern area an infestation was reported from a new housing estate where it was alleged that between 40 and 60 rats were to be seen together at one time in and around a hedgerow opposite the houses. Observations confirmed that the infestation was heavy. Before treatment commenced the co-operation of the owners of the land was sought. They agreed to trim the hedgerow, some 200 yards in extent, and cut down the vegetative growth in its vicinity to expose rat runs and burrows. Owing to the proximity of a public road and the possible danger to domestic animals the choice of extermination methods was narrowed. Poison baits were laid at specially selected points suitably protected from interference by domestic animals. The operation was completely successful. Careful observations over the ensuing weeks failed to find any trace of re-infestation.

WILLIAM RAE.

Division.	No. of INFESTATIONS TREATED.					RODENTS KILLED.			No. of Premises Proofed.	No. of Visits of Inspection.
	Food Premises.	Dwelling Houses.	Other Premises.	Sewers.	Total	Rats.	Mice.	Total.		
Central	893	2,380	884	311	5,611
Northern	523	4,044	1,031	291	4,668
Eastern	212	2,355	622	121	3,112
South-Eastern	885	4,433	275	597	3,969
South-Western	207	2,031	201	62	2,950
Total	2,720	15,243	3,013	1,382	20,310

RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951.

Five new applications for registration under this Act were received and granted during 1953, bringing the total number of registered premises in the City to 95.

Nine licences were renewed in respect of firms which manufacture or store rag flock on their premises and one new licence was granted. The total number of licensed premises at the end of the year was ten.

DISINFECTION.

This Section deals with one of the basic activities of the Health and Welfare Department, being responsible for the disinfection of premises and the administration of the Fly Control Unit. It also assists the public by the loan of equipment.

Control of the House Fly.

Precautions against Gastro-enteritis.

Ashbin shelters and horse-manure pits were sprayed with D.D.T. Emulsion 2½ per cent. as follows :—

Sprays—

Ashbin Shelters	...	...	...	...	51,582
Air-Raid Shelters	...	...	...	...	—
Horse-manure Pits	...	...	...	...	335
Offensive Trades' Buildings	...	...	...	...	—
					<hr/> 51,917 <hr/>

Materials Used—

D.D.T. Emulsion 2½%	...	...	9,880	galls.
Whiting	...	...	9,016	lbs.

There has been a considerable increase in the amount of work done. In 1952 the total number of premises sprayed was 50,265 whereas this year the total is 51,582. It would appear from the results so far obtained that this Section is getting a satisfactory grip on the problem and the time is approaching when it may be desirable to consider to what extent spraying should be continued, especially in the winter months.

Disinfestation of Premises, etc.—The table below shows the number of premises disinfected on account of the presence of infectious disease ; also shown is the number of library and school books dealt with for the same purpose.

Houses, etc., disinfected	...	...	...	7,105
Houses whitewashed	...	...	...	8
Library and School Books disinfected	...			1,316

The amount of materials used by the disinfectors and also issued to the public for the cleansing of their houses is shown in the following table :—

MATERIALS USED BY DISINFECTORS AND ISSUED TO THE PUBLIC FOR
CLEANING HOUSES, ETC.

Whiting	...	...	...	...	6,760 lbs.
Colour (dry)	...	...	...	...	1,365 lbs.
Whitewash brushes lent on hire	...				88
Exenol Disinfectant (crude)	...	...			64 galls.
Formaldehyde 40%	...	...	...		64 galls.
Naphthalene Powder	...	...	...		1,663 lbs.

Disinfection of Second-Hand Clothing.—This Department also undertakes the disinfection of second-hand clothing for export to Eire and other countries abroad. There was some reduction in this trade during the year, affecting both the foreign and Eire markets, and the number of disinfections fell from 705 in 1952 to 570 in 1953. Fees for certification totalled £357 1s. 6d. compared with £423 15s. 6d. in 1952.

Disinfecting Stations.—A variety of material is washed and disinfected at the two Disinfecting Stations at Ruchill and Belvidere, chiefly clothing, bedding and bed linen from houses in which an infectious disease has occurred and including some from dirty houses and verminous persons. In the case of the infirm elderly compassionate washings are undertaken when necessary. Bedding and bed-clothes, etc., from the Education Authority Holiday Camps, from Police Cells and from two Ambulance Associations are also dealt with. Work is also carried out for various branches of the Health and Welfare Service, viz., Day Nurseries, Old Folks' Homes, Clinics, etc., and for private firms exporting straw packing, second-hand clothing and rags, in respect of which a certificate of disinfection must be obtained from

this Department. A much appreciated service is that offered to men living in lodging houses who may have their clothes cleaned while they themselves have a bath on the premises. The number of washings, etc., carried out at the two stations during 1953 was as follows :—

				Total	
				1953	1952
Number of washings	...	...	Ruchill	Belvidere	
			9,841	8,949	18,790
Average number per day	...	...	32·16	30·02	62·18
Articles washed and disinfected			321,889	350,273	672,162
					648,314

SECTION XIII.

OCCUPATIONAL HEALTH.

The arrangements for the medical examination of Corporation Employees for admission to the Superannuation and sick Pay Schemes continued as in previous years. During 1953 there were examined 1,646 males and 604 females. Table No. 1 shows the distribution of these candidates by Department and Scheme :—

MEDICAL EXAMINATIONS CONDUCTED AT THE COCHRANE STREET CLINIC
DURING 1953.

Department	Super- annuation		Sick Pay		Entrance		Retiral		Special		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Architectural and Planning ...	15	—	1	—	6	—	—	—	—	—	22	—
Art Galleries and Museums ...	5	2	—	—	—	1	1	—	—	—	6	3
Baths ...	1	—	—	—	—	—	1	—	—	—	2	—
Blind Asylum ...	5	—	—	—	—	—	—	—	—	—	5	—
Children's ...	4	20	—	—	—	1	—	—	—	—	4	21
City Analyst ...	2	1	—	—	—	—	—	—	—	—	2	1
City Assessor ...	5	6	—	—	2	5	—	2	—	—	7	13
City Chamberlain ...	1	7	—	—	8	6	—	—	—	—	9	13
City Factor ...	10	2	2	1	5	2	2	—	—	—	19	5
Cleansing ...	245	5	108	—	—	1	5	—	—	—	358	6
Curators ...	2	1	—	17	—	—	—	—	—	—	2	18
Education ...	55	135	12	151	4	60	2	1	—	4	73	351
Gas Board ...	44	4	248	—	26	26	3	—	16	—	337	30
Halls ...	3	3	5	—	—	1	1	—	—	—	9	4
Health and Welfare ...	48	9	—	—	4	—	—	—	—	—	52	9
Highways ...	41	—	90	2	—	—	—	—	10	—	141	2
Housing ...	189	6	39	—	2	8	1	—	—	—	231	14
Information Bureau	—	1	—	—	—	1	—	—	—	—	—	2
Libraries ...	7	33	—	12	5	26	—	1	—	—	12	72
Luncheon ...	—	7	—	—	—	—	—	—	—	—	—	7
Markets ...	10	—	—	—	—	—	1	—	—	—	11	—
Parks ...	69	1	55	—	—	—	2	—	—	—	126	1
Printing ...	3	6	—	—	—	1	—	—	—	—	3	7
Probation ...	9	3	—	—	—	—	—	—	—	—	9	3
Procurator-Fiscal ...	—	1	—	—	—	—	—	—	—	—	—	1
Public Works ...	26	3	4	—	—	1	—	—	2	—	32	4
Registrars ...	1	—	—	—	—	—	—	—	—	—	1	—
Sewage ...	23	—	9	—	—	—	1	—	9	—	42	—
Town Clerk's ...	2	4	—	—	1	2	1	—	—	—	4	6
Transport ...	—	—	—	—	14	7	—	—	—	—	14	7
Water ...	70	4	25	—	2	—	—	—	4	—	101	4
Weights and Measures	11	—	—	—	—	—	—	—	—	—	11	—
Veterinary Inspector	1	—	—	—	—	—	—	—	—	—	1	—
Total ...	907	264	598	183	79	149	21	4	41	4	1,646	604

In all 242 males and 52 females were rejected as unfit for admission to the Schemes. In Table No. 2 the number of rejections are shown in relation to the clinical conditions found :—

MEDICAL EXAMINATIONS, 1953.

CLINICAL CONDITIONS EXCLUDING THE CANDIDATES FROM THE SCHEME.

				Males	Females
Tuberculosis—Pulmonary	...	...	...	35	10
Do. Other Forms	...	...	...	—	1
Chronic Bronchitis	...	...	...	23	2
Other Lung Disease	...	...	...	13	—
Heart Disease	...	...	...	14	2
High Blood Pressure	...	...	...	21	5
Anaemia	...	...	...	—	2
Varicose Veins	...	...	...	16	8
Peptic Ulcer	...	...	...	20	5
Other Abdominal Conditions	...	...	...	1	—
Hernia	...	...	...	20	1
Ear Conditions	...	...	...	37	1
Eye Conditions	...	...	...	3	—
Hyperthyroidism	...	...	...	1	1
Diabetes Mellitus	...	...	...	2	1
Breast Operation for Tumour	...	...	...	—	1
Rodent Ulcer	...	...	...	2	—
Genito-urinary Defects	...	...	...	3	2
Bone and Joint Disease	...	...	...	5	—
Dermatitis	...	...	...	4	—
Obesity	...	...	...	1	5
Poor Physique	...	...	...	8	2
Neurological and Psychiatric	...	...	...	13	3
Total	...	...	...	<u>242</u>	<u>52</u>

All persons examined were X-rayed at 20 Cochrane Street.

A feature during the year was a request by the Scottish Gas Board that locomotive drivers and shunters be examined. The examinations conformed with the British Railways requirements and certificates concerning general health, visual acuity and colour vision were issued. Special examinations were also carried out on sewer workers and compressed air workers prior to these men taking up their new employment.

During 1953 the enquiry into the occupational health requirements of factories and other places of employment in the Govan Municipal Ward of Glasgow was completed. This ward is situated in the South-West Division of Glasgow and had at the 1951 Census a population of 35,152 living in an acreage of 489. The density of the population is 72 persons per acre, a figure well above the City's average of 27 persons per acre. Within its boundaries there are 132 registered factories. These factories vary in size from one-man businesses to the massive organisation of a shipyard or engine-works.

An analysis of these 132 factories shows that no less than 45 different types of industry are carried on. In addition there are in this ward three cinemas, 465 shops and 20 restaurants, most of which employ less than 20 people. Enquiries were made into the environment, trade processes, medical and welfare arrangements in these premises. This report, which was prepared for the Occupational Health Committee of the British Medical Association, was published in December, 1953. It was shown that there is need for an occupational health service in the smaller factories and workshops as well as in the larger factories. The report should be of great value in preparing further schemes for the improvement of industrial health conditions.

In March, 1953, an investigation was made into the occurrence of cases of dermatitis amongst workers in a flour mill. The men affected had erythematous rashes of the neck and one man had a marked oedematous appearance of the face. This type of rash only appeared when the porters were handling bags of stored wheat from the Port Area Grain Control. It appeared that the wheat in these bags had been in store for at least two years. Samples of the wheat and dust were submitted to the City Bacteriologist who reported the presence of Tyroglyphid Mites in the dust. The grain in question had been fumigated with methylbromide a short while before, but the amount of grain in store made it difficult to cover the whole of the material satisfactorily.

In May, 1953, three sewer men were overcome by hydrogen sulphide fumes whilst working in a sewer. Samples of sewage were submitted immediately after the accident to the City Analyst, and these revealed a large proportion of sulphuretted hydrogen to be present. The three men in question have recovered and two have returned to their original jobs. The third man involved was allowed to return to the section in a different capacity. These men showed no chronic ill-effects from this experience.

During the year an investigation was continued with regard to protective clothing for Cleansing Department carriers. Certain modifications to the suits have been recommended and further experiments will take place at a later date.

An investigation in co-operation with the X-ray Department, 20 Cochrane Street, was made into the occurrence of tuberculosis in a small factory in the City. The Tuberculosis Physician had reported the occurrence of several cases of pulmonary tuberculosis associated with this factory. Seven cases in all were found amongst 30 workers. The ventilation conditions were investigated and the air movement

was found to be deficient. This was remedied and the factory personnel are being followed up. Another investigation of this nature was carried out in association with the Mass Radiography Unit, Ruchill Hospital.

Advice was given to the management of several firms on a method of sterilising gum boots.

At the present time an investigation is being carried out into the ventilation conditions in City bakehouses and restaurant kitchens. An opportunity is being taken in some cases to have the staff X-rayed. This survey has been carried out in conjunction with an investigation into the standards of hygiene in these establishments.

SECTION XIV

WELFARE SERVICES.

RESIDENTIAL ACCOMMODATION.

The National Assistance (Scotland) Act, 1948, Section 21, places on the Corporation the duty to provide residential accommodation for "persons who by reason of age, infirmity or any other circumstances are in need of care and attention which is not otherwise available to them." During the year under review the existing accommodation, which was provided in Foresthall, Crookston and six Small Homes, has been extended by the opening of three further Homes providing an additional 101 beds.

Foresthall provides accommodation for various types of resident. In the Hospital Section the 640 beds at the disposal of the Regional Hospital Board are fully occupied, and the admissions to Part III Accommodation during the year total 760, of whom 461 were of pensionable age. The policy of improving the amenities has been pursued by providing more sitting room and small dining room accommodation, improving toilet facilities, and redecoration. The north dining hall has been altered and redecorated, and is now in use as a television hall, a projection television set having been bought from the profits of the shop. Television is very popular with the ambulant residents and seems to be much more appreciated than the film shows provided in previous years. The dining hall has been made available for this purpose through additional provision of dining accommodation adjoining the wards, so obviating the necessity of old people having to cross the courtyard to a central dining hall for meals. Central heating has been installed in one block and part of the new dining accommodation—for 48 frail, elderly men—has been provided in this section. A small dayroom in the west section has been fitted as a billiard room and is greatly used. Improvement in clothing supplied to the residents is the continued policy of the Department.

Football and bowling have their regular following amongst the residents, who are also granted facilities for travelling with the team to matches played outwith the Home. Regular fortnightly concerts are provided during the winter months and residents also participated in outings to theatres, etc. The shop selling confectionery, tobaccos, cakes and smallwares has continued to be well patronised.

The weekly turnover in the laundry has again increased during the year from 23,984 to 24,725 articles.

Crookston Home continues to provide varied life for almost 500 old people of pensionable age, and there is always a waiting list for admission. The average age of residents in the Main Home at 31st December, 1953, was 78 for men and 80 for women, the average age of admissions during the year being 77.

The shop opened during 1952 continues to be very popular among the residents. A small tea room was opened during the year where residents and their visitors may enjoy a cup of tea, and this also has been well patronised.

The concerts provided during the winter months are well attended. The Women's Guild membership grows, and its meetings are enjoyed. A television set was donated to the Home through the generosity of the Daily Record. The Recreation and Social Club formed among the residents continues to arrange whist drives, domino tournaments, etc., and the dayrooms at the Cottage section are used every afternoon and evening as community centres.

During the year 8 men and 29 women from the Cottages were admitted to the wards, and of these, 2 men and 20 women were, after a period of nursing care, able to return to their own cottage. New admissions to the Cottages numbered 15. The average daily number of residents in the Main Home during the year was 339 and in the Cottages 111. Deaths during the year numbered 83 in the wards and 2 in the cottages.

There are at present 23 residents in Crookston over ninety years of age, two having been admitted during the year.

Burnbank was opened on 22nd April, 1953, and provides 50 beds for the most frail ambulant type, thus forming a useful link between the Eventide Homes and the Hospital Geriatric Service. The accommodation is in three flats, but a bed lift is available. There is a sitting room on each of the three flats and dining rooms on two flats. No patient is admitted who is completely bed-ridden, but this Home provides accommodation for those who require some nursing care.

The following return of the 61 admissions to Burnbank up to the end of the year is of interest :—

Admitted from their own homes	...	...	...	...	28
Admitted from hospital wards	...	...	...	...	9
Admitted from Foresthall (Geriatric Wards)	...	...	...	...	6
Admitted from Convalescent Homes and Private Rest Homes	...	...	...	...	3
Admitted from Corporation Small Homes	...	...	...	...	13
Re-admissions after hospital treatment	...	...	...	...	2

Of these 61 residents, 6 were over 90 years of age at the date of admission.

Hostel Type Homes—The six Small Homes available at the end of 1952 are as detailed below :—

Woodburn, 10-12 Cleveden Gardens	...	Opened in April, 1948	...	28 beds
Tayford, 33 Newark Drive	...	Opened in October, 1950	...	24 beds
Stoneleigh, 48 Cleveden Drive	...	Opened in November, 1951	...	24 beds
Redhills, 42 Sherbrooke Avenue	...	Opened on 18th March, 1952	...	19 beds
Woodmailing, 39 Sherbrooke Avenue	...	Opened on 18th April, 1952	...	20 beds
Ailsa, 13-15 Turnberry Road	...	Opened on 9th October, 1952	...	26 beds

These Homes were all filled to capacity during the year, 46 new residents being admitted. The majority of residents in these Homes are between 77 and 82, the oldest residents being a man and a woman who are both 94.

Two additional Homes of this type were opened during the year. *Scott House*, 56 Langside Drive, was opened on 19th May, providing accommodation for 15 ladies. This is the only Home to which only one sex is admitted, and this arrangement was made solely on the ground that it is a small house and only one sitting room is available. Negotiations are proceeding for the purchase of adjoining houses, and when this additional accommodation becomes available both men and women will be accepted in this Home in common with all others. *Huntly Lodge*, 33-34 Huntly Gardens, comprises two adjoining terrace houses, and was opened on 6th October for the accommodation of 36 residents. The average age of admission to those two new Homes was 75.

These eight Small Homes now provide accommodation for 192 residents, all of whom, while in need of care and attention, are able to go about and enjoy the amenities provided. The Homes are furnished on the same standard, hot and cold running water being available in all bedrooms and no bedroom accommodating more than four residents. The majority of rooms have accommodation for two or three.

Where ground is available at the Homes putting greens have been laid out. Competitions have been arranged by the Superintendents and residents in neighbouring Homes invited to take part. Musical evenings

have also been arranged by volunteer artistes, and our thanks are extended to the many clubs and associations which have entertained the old people during the year.

In August the Department arranged a 'bus outing to Crieff, which was attended by 157 residents.

The women residents still show an interest in knitting socks, and all residents who are sufficiently fit take their part in light domestic duties in the Homes and show an interest in the running of the households.

There are now 12 blind persons accommodated in the Small Homes. It is found that after a short time the majority can find their way about without guidance and that the sighted residents are most helpful where any assistance is required. One blind lady, although 75 years of age, is learning Braille.

Books are supplied to all Homes by the Libraries Department, and daily newspapers are available.

A full-time chiropodist was appointed during the year, and his services have been most beneficial to the residents.

The number of residents in each of the eleven Homes on the last day of December, 1953, is recorded in the following table :—

	FORESTHALL				CROOKSTON				SMALL HOMES									
	Hospital	Casual and Temp. Accomul.	Residential Accommodation	Total	Main Home	Cottages	Annexe	Total	WOODBURN	TAYFORD	STONELEIGH	REDHILLS	WOODMAILING	AILSA	BURNSHANK (Opened 2/4/53)	SCOTT HOUSE (Opened 19/5/53)	HUNTLY LODGE (Opened 8/10/53)	TOTAL
1953																		
Accommodation	640	891		1,531	342	*136	14	492	28	24	24	19	20	26	50	15	36	242
No. resident on 31st December	612	11	429	1,052	324	108	12	444	28	24	23	18	19	25	41	15	31	224

* Cottages—Single 72
 Married 64
 136

It is satisfactory to report that by the end of the year the waiting list for admission to the various Homes had been considerably reduced. The list of women desiring accommodation in single cottages at Crookston is still, however, considerable.

The total number of applications received during the year for admission to Corporation Homes was 1,149, an increase of 237 over the previous year. 760 were admitted to Foresthall, 120 to Crookston Home and Cottages, 61 to Burnbank, and 114 to the various Small Homes, a total of 1,055. 26 applications were made for supplementary payment towards the maintenance of aged persons admitted to Eventide Homes under the control of Voluntary Organisations, making the total 142 thus assisted.

Registration and Inspection of Old Persons' Homes.—During the year three applications were granted for registration of Aged Persons' Homes, and one registered Home was closed. The total number of Homes now registered is 14.

Temporary Accommodation.—The problem of "homeless" families has to a very large extent been overcome, and on 31st December, 1953, only three women, one boy and four girls were in residence. The families who had been in residence over a long period have all now been accommodated elsewhere, and any who are now admitted are encouraged to obtain other accommodation at the earliest opportunity.

During the year there were no incidents of persons rendered homeless as a result of fire, flood or other unforeseen circumstances requiring admission to Foresthall.

Persons without a settled way of living.—The number of persons without a settled way of living who were accommodated at Foresthall on behalf of the National Assistance Board averaged just over seven per night, two fewer than during the previous year.

Welfare Services for the Handicapped.—It has been found that, as the Welfare Section's work in connection with handicapped persons becomes more generally known, hospital almoners in particular have made greater demands for its services.

During the year the Department met the cost of providing ramp crossings for six handicapped persons who had been supplied with motor tri-cars by the Ministry of Pensions.

Blind Persons.—The total number of blind persons on the Department's Register at the end of the year was 2,083. Clinical attendances numbered 462, and the ophthalmologists attached to the clinic made 348 domiciliary visits, making the total examinations for the year 810, which included 132 re-examinations. 551 were certified blind and 259 not blind. Of this total of 810, 337 were resident within

the Glasgow City Area, of whom 233 were certified blind and 104 not blind. 183 changes of address were notified to the Transport Department for adjustment of travel passes and 178 deaths were intimated during the year. Three applications for assistance towards the cost of burial of blind persons were granted by the Department. Increased co-operation between the Manager of the Royal Glasgow Asylum for the Blind, the Rehabilitation Officers at the various Employment Exchanges, and the officials of the Department has eased the difficulty in placing blind persons in employment. Two young men were admitted to the Training Centre at Ceres during the year and one, on completion of training, has now been admitted to the Royal Blind School, Edinburgh, to train as a Home Teacher to the Blind. Of eight persons admitted to the Royal Blind Asylum for employment, six are resident in the Glasgow area. The Department are responsible for part of the cost of maintenance of 18 blind persons in various Homes for Aged Blind, and during the year two young children under two years of age, whose mothers were unable to look after them on account of ill-health, were admitted to the Royal Blind School, Edinburgh.

After-Care Visitation.—The home visits of children who have just left Special Schools continue to be undertaken by the After-Care Officers, and close contact is maintained with teachers in the Special Schools and with Youth Employment Officers. The great importance of placing this type of adolescent in work suitable to his or her disability cannot be over emphasised, and it is most satisfactory to note how well the mentally handicapped can maintain employment in routine work.

The Occupation Centres for adolescent lads and girls situated respectively at South Portland Street and Killearn Street have continued on the same lines as on the previous year. Fifteen new trainees were admitted to the South Portland Street Centre during the year, all of whom were mentally defective. Employment was found for two trainees, six left of their own accord and two were discharged, one for misbehaviour and the other on medical grounds. The number under training at the end of the year was 25. The previous occupations, such as rug making, sea-grass stools, lamp shades, table lamps, weaving, etc., were continued, and training in joinery has been developed during the past year. At Killearn Street ten new trainees were admitted. Six left the Centre voluntarily, one was transferred to a Residential Home for further training, and one was found employment by the Department. The previous occupations, such as sewing, machining, knitting and weaving have been continued, and at the end of the year 25 girls were under training. Both Centres are under the control of a qualified Occupational Therapist, with a Training Officer at each Centre.

The Glasgow Branch of the British Epilepsy Association were granted the use of the South Portland Street premises in order to inaugurate a social club for their members, and the first meeting was held in October. The Department have supplied certain equipment, and their Occupational Therapist teaches handicrafts. The average attendance at the club is 35.

A register of handicapped persons in the City has been compiled, and 389 generally handicapped persons and 93 epileptics have now been visited in their homes to obtain the essential information. Of these, 34 have been examined by arrangement with the Medical Adviser for Scotland to the Ministry of Labour and National Service with the undernoted results :—

Suitable for training	...	...	...	6
Referred to Occupation Centres	...	...	...	7
Referred to Epileptic Social Club	...	...	...	3
Referred to Cripple Children's League	...	...	...	1
Unsuitable for training	...	...	...	6
For further investigation	...	...	...	11

Lunacy Certification.—During the year 717 applications for removal to mental hospitals have been dealt with. Such applications are in many cases made by the patient's medical practitioner and, after examination by the Department's medical Officers, the Welfare Section contacts relatives to obtain their consent. Of these cases, 102 were referred to the Department by the Procurator Fiscal as persons who, while in custody, have been deemed mentally unfit to plead.

Contributions to Old People's Organisations.—Fourteen Voluntary Organisations providing meals or recreation for old people have been granted crockery, kettles, tea urns, games, etc., during the year.

Compulsory Removal of Persons in Need of Care and Attention.—Under Section 47 of the National Assistance Act, the compulsory removal of persons in need of attention was enforced only three times.

Burials and Cremations.—During the year 282 burials were arranged by the Department, an increase of 29 from the previous year. In respect of these burials, claims in terms of Section 22 (5) of the National Insurance Act, 1946, were made against the Ministry of National Insurance in 82 cases. Of these Claims, 65 were granted, 16 refused, and 1 is still under consideration.

Clothing Store.—The Clothing Store supplies the needs of residents in the Homes, boarded-out mental defectives and those granted clothing by the National Assistance Board. The value of the clothing distributed during the year was well over £100,000.

Investigations.—The Welfare Section undertakes investigations on behalf of the Child Welfare and Domestic Help Sections of the Department and on behalf of the Education Department in connection with the supply of food, clothing, etc., and the City Chamberlain's Department (Collector's Section) in connection with applications for relief from payment of rates. It has also been the practice, at the request of the Lord Provost, to undertake investigations on his behalf. Assessment of the appropriate charges in connection with the Child Welfare cases and Domestic Help applications are also undertaken by the Welfare Section. The number of such investigations during the year totalled 14,042.

District Welfare Officers visited 134 persons brought to the notice of the Department by hospital almoners, general practitioners, ministers of religion, National Assistance Board Officials, voluntary organisations, friends, relatives, health visitors or sanitary inspectors. An early visit and the introduction of a service such as Meals-on-Wheels or domestic help is often sufficient to meet their requirements, or advice may be given on financial matters. The Welfare Officers continue to visit these cases at intervals and often help to avoid the condition of the person deteriorating to such an extent that they require hospital services or admission to a home.

SECTION XV.

LEGISLATION, 1953.

The following Acts of Parliament, Regulations, etc., applicable to the Health and Welfare Services in Scotland came into operation during the year :—

Education (Miscellaneous Provisions) Act, 1953.—Amends the law relating to education in England and Wales and makes further provision with respect to the duties of education authorities in Scotland as to dental treatment.

CIRCULARS, ORDERS, REGULATIONS, ETC., ISSUED IN 1953.

S.I. = Statutory Instrument. *D.H.S.* = Department of Health for Scotland.
M.F. = Ministry of Food. *S.E.D.* = Scottish Education Department.

Food—

M.F. 4/53 (U.K.), 16.1.53—Home Canned Fruit and Vegetables Order, 1950 (Revocation).

S.I. 536/1953, 25.3.53—Labelling of Food Order, 1953.

S.I. 691/1953, 22.4.53—Food Standards (Preserves) Order, 1953.

S.I. 725/1953, 28.4.53—Welfare Foods Order, 1953.

S.I. 828/1953, 18.5.53—Food Standards (Icecream) Order, 1953.

S.I. 1307/1953, 24.8.53—Food Standards (Preserves) (Amendment) Order, 1953.

S.I. 1310/1953, 24.8.53—Food Standards (Saccharin Tablets) Order, 1953.

S.I. 1311/1953, 24.8.53—Artificial Sweeteners in Food Order, 1953.

M.F. 17/53 (U.K.), 26.8.53—(a) Standard for Saccharin Tablets and Other Sweetening Tablets containing Saccharin, (b) Prohibition on use of artificial sweeteners in food.

S.I. 1282, 17.8.53—The Flour Order, 1953.

S.I. 1283, 17.8.53—The Bread Order, 1953.

D.H.S. Circular 72/1953, 27.10.53—Flour Order, 1953, and Bread Order, 1953.

M.F. Letter, 30.10.53—Labelling of Food Order, 1953.

S.I. 1627 (S.114), 11.11.53—Public Health (Preservatives in Food) (Scotland) Amendment Regulations, 1953.

D.H.S. Circular 79, 24.11.53—Public Health (Preservatives in Food) (Scotland) Amendment Regulations, 1953.

S.I. 1828, 11.12.53—Food Standards (Soft Drinks) Order, 1953.

S.I. 1859 (S.125), 16.12.53—Public Health (Preservatives in Food) (Scotland) Amendment (No. 2) Regulations, 1953.

S.I. 1889, 22.12.53—Labelling of Food (Amendment) Order, 1953.

Infectious Disease—

S.I. 151/1953, 2.2.53—Parrots and Miscellaneous Birds (Prohibition of Importation) Order, 1953.

Maternity and Child Welfare—

D.H.S. Circular, 24/1953, 10.6.53—Child Health.

Meat Inspection—

- M.F. 1/53, 13.1.53—Meat Products (No. 3) Order, 1952 (S.I. 1952, No. 2257).
 D.H.S. FIF/1/Sud., 6.2.53—Public Health (Imported Food) (Scotland) Regulations. Sudan Government Official Certificate
 D.H.S. FIF/1/Erit., 13.2.53—Public Health (Imported Food) (Scotland) Regulations. Government of Eritrea Official Certificate.
 D.H.S. FIF/1/Falk., 27.3.53—Public Health (Imported Food) (Scotland) Regulations. Government of Falkland Islands Official Certificate.
 D.H.S. FIF/1/Greece, 22.4.53—Public Health (Imported Food) (Scotland) Regulations. Kingdom of Greece Official Certificate.
 S.I. 246/1953, 18.2.53—The Offals in Meat Products Order, 1953.
 M.F. Circular 6/53 (U.K.), 23.2.53—The Offals in Meat Products (No. 3) Order, 1953.
 D.H.S. F.W.M./3/3, 23.7.53—Food and Drugs (Whalemeat) (Scotland) Regulations, 1949 and 1950. Kingdom of Norway.

Milk—

- S.I. 552/1953, 26.3.53—Cream and Use of Milk (Revocation) Order, 1953.
 D.H.S. Memo. No. 14/1953, 1.4.53—Cream and Use of Milk (Revocation) Order, 1953.
 S.I. 615/1953, 8.4.53—Milk (Special Designations) (Specified Areas) (Scotland) Order, 1953.
 S.I. 726/1953, 28.4.53—Milk (Gt. Britain) Order, 1953.
 D.H.S. 35/1953, 12.6.53—Milk (Special Designations) (Scotland) Order, 1951. Ear-marking of cattle.
 S.I. 1618, 9.11.53—Public Health (Condensed Milk) (Scotland) Amendment Regulations, 1953.
 S.I. 1862, 17.12.53—Milk (Special Designations) (Specified Areas) (Scotland) (No. 2) Order, 1953.

National Assistance—

- S.I. 1118 (S.94), 17.7.53—National Assistance (Charges for Accommodation) (Scotland) Amendment Regulations, 1953.
 S.I. 1413, 23.9.53—Re-establishment Centres. Regulations Confirmation Instrument, 1953.

National Health Service—

- S.I. 366/S.32, 7.3.53—General Medical and Pharmaceutical Services (Scotland) Amendment Regulations, 1953.
 S.I. 608 (S.54), 27.3.53—National Health Service (Constitution of Regional Hospitals Boards) (Scotland) Amendment Order, 1953.
 S.I. 802 (S.70), 11.5.53—Local Health Authorities. Estimation of Expenditure (Scotland) Amendment Regulations, 1953.
 D.H.S. Circular 23/1953, 15.5.53—Exchequer Grant under Section 53 (1) of National Health Service (Scotland) Act, 1947.

Nursing—

- D.H.S. Circular 1/1953, 12.1.53—National Health Service Joint Refresher Course for Midwives and District Nursing Sisters.

Public Health—

- S.I. 1036, 1.7.53—Merchant Shipping Masters and Seamen. The Merchant Shipping (Crew Accommodation) Regulations, 1953.
 D.H.S. Circular 44/1953, 8.7.53—Prevention of Nuisance from Blowflies.

APPENDIX

TABLE I.—GLASGOW, 1953.—ESTIMATED POPULATION IN EACH MUNICIPAL WARD, ACREAGE, AND PERSONS PER ACRE.

MUNICIPAL WARDS	POPULATION				Acreage	Persons per acre including Institution and Shippin
	Without Institutions and Shipping	Institu- tions†	Shipping*	Total		
1. Shettleston and Tollcross ...	41,540	162	—	41,702	1,167	36
2. Parkhead ...	20,240	512	—	20,752	819	25
3. Dalmarnock ...	39,181	30	—	39,211	487	81
4. Calton ...	23,841	1,380	—	25,221	404	62
5. Mile-end ...	38,951	295	—	39,246	443	89
6. Dennistoun ...	26,070	12	—	26,082	689	38
7. Provan ...	26,423	1,919	—	28,342	4,846	6
8. Cowlairs ...	26,188	1,121	—	27,309	645	42
9. Springburn ...	35,219	2,458	—	37,677	2,118	18
10. Townhead ...	31,575	2,178	—	33,753	301	112
11. Exchange ...	14,601	3,991	31	18,623	507	37
12. Anderston ...	29,150	1,424	252	30,826	530	58
13. Park ...	21,426	610	—	22,036	317	70
14. Cowcaddens ...	25,452	505	—	25,957	488	53
15. Woodside ...	24,514	567	—	25,081	170	148
16. Ruchill ...	50,083	768	—	50,851	1,962	26
17. North Kelvin	24,900	64	—	24,964	278	90
18. Maryhill ...	23,962	1,309	2	25,273	2,210	11
19. Kelvinside ...	18,559	1,568	—	20,127	1,160	17
20. Partick (East)	21,461	922	—	22,383	351	64
21. Partick (West)	27,065	17	71	27,153	464	59
22. Whiteinch ...	22,420	357	—	22,777	894	25
23. Yoker ...	29,317	275	52	29,644	1,213	24
24. Knightswood	17,227	270	—	17,497	1,614	11
25. Hutchesontown	30,009	36	—	30,045	387	78
26. Gorbals ...	34,174	7	—	34,181	252	136
27. Kingston ...	25,551	187	80	25,818	355	73
28. Kinning Park	26,873	129	472	27,474	402	68
29. Govan ...	33,910	100	61	34,071	489	70
30. Fairfield ...	22,450	1,348	465	24,263	1,351	18
31. Craigton ...	39,241	342	—	39,583	1,566	25
32. Pollokshields	40,264	2,393	—	42,657	3,239	13
33. Camphill ...	21,594	168	—	21,762	481	45
34. Pollokshaws ...	48,277	336	—	48,613	3,223	15
35. Govanhill ...	24,753	504	—	25,257	365	69
36. Langside ...	24,984	935	—	25,919	801	32
37. Cathcart ...	22,704	166	—	22,870	2,737	8
CITY ...	1,054,149	29,365	1,486	1,085,000	39,725	27

* 1951 Census.

† Includes squatters.

TABLE II.—GLASGOW, 1953.—INHABITED AND UNOCCUPIED HOUSES
IN EACH MUNICIPAL WARD. †

MUNICIPAL WARDS	INHABITED HOUSES*				Empty Houses
	1953	1952	Decrease	Increase	
1. Shettleston and Toll- cross... ..	11,419	11,074	—	345	23
2. Parkhead	5,763	5,819	56	—	13
3. Dalmarnock	12,089	12,198	109	—	54
4. Calton... ..	7,028	7,102	74	—	39
5. Mile-end	11,366	11,384	18	—	48
6. Dennistoun	8,274	8,280	6	—	64
7. Provan	7,322	5,939	—	1,383	24
8. Cowlairs	8,090	8,140	50	—	17
9. Springburn	8,477	8,337	—	140	27
10. Townhead	9,682	9,729	47	—	33
11. Exchange	4,528	4,632	104	—	37
12. Anderston	8,341	8,406	65	—	36
13. Park	6,341	6,453	112	—	130
14. Cowcaddens	7,501	7,586	85	—	32
15. Woodside	7,886	7,952	66	—	56
16. Ruchill	12,248	11,789	—	459	27
17. North Kelvin	8,360	8,349	—	11	90
18. Maryhill	7,312	6,957	—	355	32
19. Kelvinside	6,890	6,963	73	—	210
20. Partick (East)	7,198	7,251	53	—	174
21. Partick (West)	8,878	8,745	—	133	71
22. Whiteinch	6,906	6,869	—	37	29
23. Yoker	7,897	7,888	—	9	14
24. Knightswood	4,687	4,501	—	186	7
25. Hutchesontown	9,499	9,558	59	—	31
26. Gorbals	8,995	9,249	254	—	38
27. Kingston	7,358	7,369	11	—	14
28. Kinning Park	8,220	8,175	—	45	40
29. Govan... ..	9,009	9,138	129	—	38
30. Fairfield	6,728	6,723	—	5	18
31. Craigton	10,688	10,628	—	60	38
32. Pollokshields	9,499	9,325	—	174	76
33. Camphill	7,890	7,917	27	—	85
34. Pollokshaws	10,536	10,357	—	179	21
35. Govanhill	8,392	8,436	44	—	55
36. Langside	8,540	8,120	—	420	95
37. Cathcart	7,946	7,121	—	825	55
CITY	307,783	304,459	—	3,324	1,891

* Includes inhabitant occupiers.

TABLE III.—GLASGOW.—LININGS GRANTED BY DEAN OF GUILD COURT
IN YEARS FROM 1919 IN RESPECT OF HOUSES.

Year ending 31st August.	NUMBER OF APARTMENTS.						TOTAL.
	1.	2.	3.	4.	5.	6.	
1919-20 (Annual Average)	—	6	692	246	107	29	1,080
1921-25 (do.)	—	308	638	400	234	51	1,631
1926-30 (do.)	—	350	3,067	1,346	448	90	5,301
1931-35 (do.)	13	349	2,287	1,578	131	23	4,381
1936-39 (do.)	—	—	1,581	2,140	533	24	4,279
1940-43 (do.)	—	—	—	—	—	—	—
1944-48 (do.)	25	23	226	792	145	2	1,213
1949	86	—	780	1,186	13	—	2,065
1950	72	187	1,738	3,513	260	5	5,775
1951	10	174	3,497	2,881	287	—	6,849
1952	123	116	2,485	2,045	603	—	5,372
1953	163	61	3,511	1,527	280	3	5,545

TABLE IV.—ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT
SPRINGBURN PUBLIC PARK.

MONTHS. 1953.	TEMPERATURE.			RAINFALL.		SUNSHINE. Hours.
	Highest Temp. in Shade.	Lowest Temp. in Shade.	Mean Temp.	No. of Days.	Amount Collected in inches.	
January ...	50	20	38·7	17	1·43	30·6
February ...	54	25	40·4	17	1·38	62·9
March ...	59	27	42·3	7	·96	79·6
April ...	64	27	43·0	14	1·83	131·2
May ...	76	35	53·9	14	2·31	187·2
June ...	80	39	57·7	13	2·57	154·5
July ...	78	43	57·7	24	5·30	114·1
August ...	79	41	58·5	16	3·65	142·9
September ...	73	42	55·5	19	3·52	80·0
October ...	63	31	48·7	16	2·39	54·8
November ...	56	33	45·5	25	6·44	18·2
December ...	55	27	41·6	24	4·73	22·1
1940	85	6	46·5	210	39·52	1,111
1941	80	12	46·3	204	33·34	1,035
1942	80	18	46·3	220	40·64	1,067
1943	86	23	48·0	252	45·43	1,094
1944	80	21	47·3	231	44·44	953
1945	81	11	48·6	233	43·62	1,199
1946	77	19	47·3	222	39·93	1,220
1947	86	8	46·7	209	38·63	1,086
1948	85	25	48·1	233	53·33	1,157
1949	84	19	49·3	222	43·20	1,310
1950	88	18	46·7	226	45·37	1,181
1951	81	21	46·8	221	41·46	1,182
1952	79	15	46·3	195	35·32	1,280
1953	80	20	48·6	206	36·51	1,078

TABLE V.—GLASGOW.—BIRTHS AND BIRTH-RATES *per Million* IN EACH WARD, FOR THE YEAR 1953, AND NUMBER AND PERCENTAGE OF ILLEGITIMATE BIRTHS.

MUNICIPAL WARDS.	Births 1953	Birth- rate 1953	Birth- rate 1952	Illegitimate Births.	
				No.	% Total Births.
1. Shettleston and Tollcross ...	790	19,018	19,432	31	3.9
2. Parkhead	365	18,034	18,384	23	6.3
3. Dalmarnock	931	23,762	21,971	38	4.1
4. Calton	559	23,447	20,380	43	7.7
5. Mile-end... ..	838	21,514	22,848	44	5.2
6. Dennistoun	442	16,954	17,064	17	3.8
7. Provan	456	17,258	16,969	27	5.9
8. Cowlares	568	21,689	23,111	20	3.5
9. Springburn	582	16,525	18,114	24	4.1
10. Townhead	797	25,241	23,426	51	6.4
11. Exchange	358	24,519	24,444	23	6.4
12. Anderston	626	21,475	22,125	34	5.4
13. Park	357	16,662	16,798	33	9.2
14. Cowcaddens	630	24,752	23,349	32	5.1
15. Woodside	618	25,210	22,905	34	5.5
16. Ruchill	952	19,008	18,985	55	5.8
17. North Kelvin	522	20,964	19,725	26	5.0
18. Maryhill	492	20,532	20,537	29	5.9
19. Kelvinside	225	12,123	11,057	8	3.6
20. Partick (East)	350	16,309	15,741	19	5.4
21. Partick (West)	526	19,435	19,360	15	2.9
22. Whiteinch	330	14,719	15,545	13	3.9
23. Yoker	336	11,461	12,389	9	2.7
24. Knightswood	231	13,409	13,909	11	4.8
25. Hutchesontown... ..	769	25,626	25,881	32	4.2
26. Gorbals	964	28,209	26,577	84	8.7
27. Kingston	586	22,935	23,462	22	3.8
28. Kinning Park	608	22,625	22,965	33	5.4
29. Govan	807	23,798	23,532	46	5.7
30. Fairfield	412	18,352	18,931	8	1.9
31. Craigton	466	11,875	12,781	11	2.4
32. Pollokshields	533	13,238	14,391	14	2.6
33. Camphill	262	12,133	12,663	8	3.1
34. Pollokshaws	833	17,255	17,716	38	4.6
35. Govanhill	436	17,614	18,401	13	3.0
36. Langside	323	12,928	13,449	10	3.1
37. Cathcart	294	12,949	12,631	6	2.0
Institutions	58	—	—	35	—
Harbour	—	—	—	—	—
CITY	20,232	18,647	18,713	1,019	5.0

TABLE VI.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* IN EACH MUNICIPAL WARD, FOR THE YEAR 1953, AND CORRESPONDING RATES 1952 AND 1951.

MUNICIPAL WARDS.	Deaths 1953	Death-rates		
		1953	1952	1951
1. Shettleston and Tollcross ...	454	10,929	11,298	11,952
2. Parkhead	240	11,858	13,365	11,809
3. Dalmarnock	435	11,102	13,467	12,859
4. Calton	314	13,171	14,208	14,589
5. Mile-end	452	11,604	12,640	12,131
6. Dennistoun	368	14,116	13,576	15,088
7. Provan	287	10,862	12,919	12,810
8. Cowlares	310	11,837	13,094	13,492
9. Springburn	342	9,711	8,524	9,954
10. Townhead	390	12,352	14,235	13,095
11. Exchange	211	14,451	16,448	15,776
12. Anderston	326	11,184	13,322	14,634
13. Park	312	14,562	14,726	15,376
14. Cowcaddens	277	10,883	11,887	12,712
15. Woodside	333	13,584	13,535	13,753
16. Ruchill	464	9,265	11,194	11,870
17. North Kelvin	265	10,643	12,175	12,431
18. Maryhill	276	11,518	12,162	12,610
19. Kelvinside	276	14,871	14,725	14,330
20. Partick (East)	291	13,559	13,734	15,158
21. Partick (West)	311	11,491	13,141	13,375
22. Whiteinch	283	12,623	12,347	13,459
23. Yoker	318	10,847	10,663	10,918
24. Knightswood	200	11,610	11,679	11,754
25. Hutchesontown	336	11,197	12,332	12,452
26. Gorbals	367	10,739	12,231	12,260
27. Kingston	297	11,624	11,712	13,602
28. Kinning Park	301	11,201	13,948	12,468
29. Govan	362	10,675	11,463	12,446
30. Fairfield	243	10,824	12,855	11,500
31. Craigton	416	10,601	10,321	11,961
32. Pollokshields	371	9,214	9,519	9,863
33. Camphill	333	15,421	17,036	16,163
34. Pollokshaws	375	7,768	7,966	9,422
35. Govanhill	320	12,928	13,850	13,496
36. Langside	309	13,368	13,981	15,488
37. Cathcart	335	14,755	13,852	14,586
Institutions	719	—	—	—
Harbour	8	—	—	—
CITY	12,827	11,822	12,736	13,133

TABLE VII.—GLASGOW.—NUMBER OF OUTWARD AND INWARD TRANSFER DEATHS
FOR THE YEAR 1953.

No.	CAUSE OF DEATH.	Outward Transfers.	Inward Transfers.
1	Tuberculosis of Respiratory System	22	50
2	Tubercular Meningitis	6	2
51	Abdominal Tuberculosis	2	—
52	Other Tuberculous Diseases	12	3
3	Syphilis and its Sequelae	5	6
4	Typhoid Fever	—	—
6	Dysentery, all forms	1	—
7	Scarlet Fever and Streptococcal Sore Throat	1	—
8	Diphtheria	—	—
9	Whooping Cough	1	—
10	Meningococcal Infections	3	—
12	Acute Poliomyelitis	—	1
14	Measles	3	—
17	Other Infective and Parasitic Diseases	7	3
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	364	117
19	Benign and Unspecified Neoplasms	19	25
20	Diabetes Mellitus	11	5
21	Anaemias	7	2
22	Vascular Lesions affecting Central Nervous System	147	88
23	Non-meningococcal Meningitis	2	1
54	Other Nervous Diseases (including Mental Disorders)	19	19
24	Rheumatic Fever	7	2
25	Chronic Rheumatic Heart Disease	25	9
26	Arteriosclerotic and Degenerative Heart Disease	183	182
27	Other Diseases of Heart	14	7
28	Hypertension with Heart Disease	14	12
29	Hypertension without mention of Heart	15	3
55	Other Diseases of Circulatory System	35	15
30	Influenza	1	1
31	Pneumonia (except Pneumonia of Newborn)	49	33
32	Bronchitis	20	12
53	Other Respiratory Diseases	12	6
33	Ulcer of Stomach and Duodenum	45	1
34	Appendicitis	13	—
35	Intestinal Obstruction and Hernia	32	4
36	Gastritis and Duodenitis	—	—
	Enteritis } Under 2 years (except Diarrhoea of Newborn)	3	1
	& Colitis } 2 years and over	7	—
37	Cirrhosis of Liver	12	1
56	Other Digestive Diseases	35	6
38	Nephritis and Nephrosis	26	2
39	Hyperplasia of Prostate	26	4
40	Complications of Pregnancy, Childbirth and the Puerperium	3	—
41	Congenital Malformations	50	7
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	35	7
43	Infections of the Newborn—Pneumonia	3	—
	“ “ Diarrhoea	1	—
	“ “ Others	2	—
44	Other Diseases peculiar to early infancy and Immaturity Unqualified	20	6
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes	21	16
46	All Other Diseases	50	13
47, 50	Suicide, Road Traffic Accidents and Other Violent Causes	112	72
16	Malaria	—	—
	TOTAL	1,503	744

TABLE VIII.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* FROM DIFFERENT CAUSES, FOR THE YEAR 1953, AND CORRESPONDING RATES FOR 1952 AND 1951.

No.	CAUSE.	Deaths 1953	Annual Death Rate per Million.		
			1953	1952	1951
1	Tuberculosis of Respiratory System	471	434	525	697
2	Tubercular Meningitis	14	13	31	52
51	Abdominal Tuberculosis	4	4	5	—
52	Other Tuberculous Diseases	25	23	30	27
3	Syphilis and its Sequelae	33	30	49	37
4	Typhoid Fever	—	—	—	—
6	Dysentery, all forms	4	4	2	4
7	Scarlet Fever and Streptococcal Sore Throat	—	—	1	1
8	Diphtheria	—	—	6	4
9	Whooping Cough	15	14	3	23
10	Meningococcal Infections	12	11	9	14
12	Acute Poliomyelitis	2	2	1	2
14	Measles	8	7	6	—
17	Other Infective and Parasitic Diseases	34	31	40	28
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	2,228	2,053	2,055	2,002
19	Benign and Unspecified Neoplasms	97	89	83	98
20	Diabetes Mellitus	104	96	85	97
21	Anaemias	48	44	55	64
22	Vascular Lesions affecting Central Nervous System	1,734	1,598	1,752	1,881
23	Non-meningococcal Meningitis	7	6	17	17
54	Other Nervous Diseases	200	184	189	220
24	Rheumatic Fever	25	23	15	25
25	Chronic Rheumatic Heart Disease	236	218	231	217
26	Arteriosclerotic and Degenerative Heart Disease	3,075	2,834	3,084	3,158
27	Other Diseases of Heart	206	190	181	209
28	Hypertension with Heart Disease	206	190	175	195
29	Hypertension without mention of Heart	144	133	115	133
55	Other Diseases of Circulatory System	272	251	240	243
30	Influenza	74	68	109	168
31	Pneumonia (except Pneumonia of Newborn)	428	394	489	485
32	Bronchitis	627	578	635	679
53	Other Respiratory Diseases	106	98	123	108
33	Ulcer of Stomach and Duodenum	122	112	113	118
34	Appendicitis	20	18	21	25
35	Intestinal Obstruction and Hernia	81	75	87	72
	Gastritis and Duodenitis	6	6	6	3
36	Enteritis and Colitis— Under 2 years (excluding Diarrhoea of Newborn)	44	41	53	53
	2 years and over	28	26	26	49
37	Cirrhosis of Liver	32	29	35	41
56	Other Digestive Diseases	93	86	90	97
38	Nephritis and Nephrosis	130	120	111	127
39	Hyperplasia of Prostate	61	56	69	61
40	Complications of Pregnancy, Childbirth and the Puerperium	21	19	23	18
41	Congenital Malformations	147	135	134	126
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	182	168	176	183
43	Infections of the Newborn—Pneumonia	20	18	25	50
	Do. do. Diarrhoea	5	5	9	8
	Do. do. Others	1	1	4	2
44	Other Diseases peculiar to early infancy and immaturity Unqualified Senility without mention of Psychosis, Ill-defined and Unknown Causes	153	141	163	182
45	All Other Diseases	376	347	431	491
46	Suicide, Road Traffic Accidents and Other Violent Causes	268	247	287	251
47/50	Smallpox	598	552	541	520
13	Smallpox	—	—	—	—
	Total	12,827	11,822	12,736	13,133

TABLE IX.—GLASGOW, 1953.—DEATHS FROM DIFFERENT CAUSES
IN SEXES AND AT SEVERAL AGE PERIODS (MALES).

No.	CAUSE	-1	-2	-5	-10	15	-20	-25	-35	-45	-55	-65	-75	75+	Total Males
1	Tuberculosis of Respiratory System ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	Tubercular Meningitis ...	—	1	1	1	1	2	12	37	40	70	89	38	15	307
51	Abdominal Tuberculosis ...	—	1	3	3	—	—	—	2	—	—	—	—	—	9
52	Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—	—	1	—	1
3	Syphilis and its Sequelae ...	—	—	2	—	—	1	—	3	—	2	3	2	—	13
4	Typhoid Fever ...	—	—	—	—	—	—	—	—	3	6	6	5	1	21
6	Dysentery, all forms ...	—	1	—	—	—	—	—	—	—	—	—	—	—	2
7	Scarlet Fever and Streptococcal Sore Throat ...	—	—	—	—	—	—	—	—	—	—	—	—	1	—
8	Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Whooping Cough ...	3	1	1	—	—	—	—	—	—	—	—	—	—	5
10	Meningococcal Infections ...	2	2	2	—	—	—	—	—	—	—	—	—	1	7
12	Acute Poliomyelitis ...	—	—	—	—	—	—	1	—	—	—	—	—	—	1
14	Measles ...	—	1	1	—	—	—	—	—	—	—	—	—	—	2
17	Other Infective and Parasitic Diseases ...	—	2	—	1	—	—	—	—	2	2	2	1	1	11
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues ...	1	3	1	2	4	4	7	20	69	208	340	404	194	1,257
19	Benign and Unspecified Neoplasms ...	—	1	—	3	1	—	—	3	2	16	11	9	6	52
20	Diabetes Mellitus ...	—	—	—	—	2	—	1	—	2	3	3	8	5	22
21	Anaemias ...	—	—	—	—	—	—	—	1	—	—	5	7	2	17
22	Vascular Lesions affecting Central Nervous System	—	—	—	—	—	2	2	2	9	30	125	265	326	761
23	Non-meningococcal Meningitis ...	3	1	1	—	—	—	1	2	—	—	1	—	—	7
24	Rheumatic Fever ...	—	—	—	—	—	4	2	2	—	1	—	1	—	10
25	Chronic Rheumatic Heart Disease ...	—	—	—	—	1	6	3	11	14	19	6	10	5	75
26	Arteriosclerotic and Degenerative Heart Disease ...	—	—	—	—	—	1	—	12	40	174	352	554	556	1,689
27	Other Diseases of Heart ...	—	—	—	1	—	—	1	2	5	11	17	32	30	99
28	Hypertension with Heart Disease ...	—	—	—	—	—	—	—	—	3	7	22	28	30	90
29	Hypertension without mention of Heart ...	—	—	—	—	—	—	—	—	3	8	12	24	19	68
30	Influenza ...	1	—	—	—	—	—	—	2	3	8	12	24	19	68
31	Pneumonia (except Pneumonia of Newborn) ...	38	4	4	—	—	1	3	1	11	21	36	50	67	236
32	Bronchitis ...	7	2	—	—	—	—	—	1	8	59	112	145	87	421
53	Other Respiratory Diseases	4	1	2	—	—	—	—	4	2	7	12	15	24	71
33	Ulcer of Stomach and Duodenum ...	—	—	—	—	—	—	1	1	9	10	28	24	14	87
34	Appendicitis ...	—	—	1	2	—	1	—	—	—	2	2	1	1	10
35	Intestinal Obstruction and Hernia ...	2	—	—	—	—	—	—	1	—	6	7	4	12	32
36	Gastritis and Duodenitis ...	—	—	—	—	—	—	—	1	—	—	2	—	—	3
36	Enteritis and Colitis— Under 2 years (excluding Diarrhoea of Newborn)	23	—	—	—	—	—	—	—	—	2	1	3	1	23
37	2 years and over ...	—	—	1	—	—	1	—	—	—	2	1	3	1	9
38	Cirrhosis of Liver ...	—	—	—	—	—	—	—	2	—	1	8	4	4	19
39	Nephritis and Nephrosis ...	—	—	—	—	2	3	2	6	6	5	13	15	6	58
40	Hyperplasia of Prostate ...	—	—	—	—	—	—	—	—	—	1	7	16	37	61
40	Complications of Pregnancy, Childbirth and the Puerperium ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41	Congenital Malformations ...	56	1	4	2	—	—	—	2	1	4	1	4	—	75
42	Birth Injuries, Post-natal Asphyxia and Atelectasis	114	—	—	—	—	—	—	—	—	—	—	—	—	114
43	Infections of the Newborn— Pneumonia ...	15	—	—	—	—	—	—	—	—	—	—	—	—	15
43	Diarrhoea ...	4	—	—	—	—	—	—	—	—	—	—	—	—	4
43	Others ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
44	Other Diseases peculiar to early infancy and Immaturity Unqualified ...	92	—	—	—	—	—	—	—	—	—	—	—	—	92
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes ...	18	1	—	1	3	1	—	—	6	23	35	55	73	213
46	All other Diseases ...	2	—	1	—	—	2	—	—	1	16	20	34	22	101
47	Suicide, Road Traffic Accidents and other Violent Causes ...	33	2	14	25	13	16	8	26	38	54	50	48	55	382
50	Other Nervous Diseases ...	2	2	3	2	2	—	2	9	8	20	17	19	13	99
54	Other Diseases of Circulatory System ...	—	—	—	—	—	1	—	1	2	3	9	38	79	133
56	Other Digestive Diseases ...	—	—	—	1	—	—	1	—	3	5	9	12	8	39
	Total ...	420	27	42	44	29	46	47	152	288	798	1,372	1,881	1,703	6,849

TABLE IX.—GLASGOW, 1953.—DEATHS FROM DIFFERENT CAUSES
IN SEXES AND AT SEVERAL AGE PERIODS (FEMALES).

No.	CAUSE	-1	-2	-5	-10	-15	-20	-25	35	-45	-55	-65	-75	75+	Total Females	Total Both Sexes
1	Tuberculosis of Respiratory System ...	1	3	1	—	1	13	18	41	37	20	17	10	2	164	47
2	Tubercular Meningitis ...	—	—	3	—	1	—	—	1	—	—	—	—	—	5	14
51	Abdominal Tuberculosis ...	—	—	—	—	—	—	—	—	1	—	—	1	1	3	4
52	Other Tuberculous Diseases ...	—	—	—	—	1	—	—	3	2	3	2	1	—	11	25
3	Syphilis and its Sequelae ...	1	—	—	—	—	—	—	1	2	3	2	2	1	11	24
4	Typhoid Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Dysentery, all forms ...	—	—	—	—	—	—	—	—	—	—	—	—	2	2	4
7	Scarlet Fever and Streptococcal Sore Throat ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Whooping Cough ...	6	4	—	—	—	—	—	—	—	—	—	—	—	10	5
10	Meningococcal Infections ...	4	1	—	—	—	—	—	—	—	—	—	—	—	5	12
12	Acute Poliomyelitis ...	—	—	1	—	—	—	—	—	—	—	—	—	—	1	1
14	Measles ...	4	1	1	—	—	—	—	—	—	—	—	—	—	6	7
17	Other Infective and Parasitic Diseases ...	3	1	—	—	—	1	—	1	1	2	5	4	5	23	34
18	Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues ...	—	—	2	4	—	3	—	20	66	152	240	289	195	971	2,228
19	Benign and Unspecified Neoplasms ...	—	1	—	1	2	—	—	3	3	13	11	7	4	45	97
20	Diabetes Mellitus ...	—	—	—	—	—	1	—	—	2	6	16	35	22	82	164
21	Anaemias ...	—	—	—	1	—	—	—	—	—	2	6	12	10	31	48
22	Vascular Lesions affecting Central Nervous System ...	—	—	—	—	—	1	1	—	19	55	147	330	42	973	1,734
23	Non-meningococcal Meningitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
24	Rheumatic Fever ...	—	—	1	—	3	3	1	1	1	1	2	1	1	15	25
25	Chronic Rheumatic Heart Disease ...	—	—	—	—	—	3	2	17	31	39	24	28	17	161	236
26	Arteriosclerotic and Degenerative Heart Disease ...	—	—	—	—	—	—	—	2	15	48	146	431	744	1386	3,775
27	Other Diseases of Heart ...	—	—	—	1	—	—	—	—	5	7	14	40	40	107	266
28	Hypertension with Heart Disease ...	—	—	—	—	—	—	—	—	5	11	21	49	30	116	266
29	Hypertension without mention of Heart ...	—	—	—	—	—	—	—	2	1	5	20	30	18	76	144
30	Influenza ...	—	1	1	—	—	—	1	—	—	3	6	12	24	48	74
31	Pneumonia (except Pneumonia of Newborn) ...	21	1	1	2	—	2	—	7	7	13	22	43	73	192	428
32	Bronchitis ...	4	2	—	—	—	—	1	—	4	10	33	54	98	266	627
53	Other Respiratory Diseases ...	2	—	—	1	—	—	—	3	—	1	3	13	12	35	166
33	Ulcer of Stomach and Duodenum ...	—	—	—	—	—	—	1	1	2	3	9	8	11	35	122
34	Appendicitis ...	—	—	—	1	1	1	—	—	2	2	1	2	—	10	20
35	Intestinal Obstruction and Hernia ...	1	—	—	—	—	—	—	1	1	6	5	17	18	49	81
36	Gastritis and Duodenitis ...	—	—	—	—	—	—	—	—	—	—	—	—	3	3	6
	Enteritis and Colitis—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Under 2 years (excluding Diarrhoea of Newborn)	21	—	—	—	—	—	—	—	—	—	—	—	—	21	44
37	2 years and over ...	—	—	1	—	—	—	1	—	1	1	3	3	9	19	28
38	Cirrhosis of Liver ...	—	—	—	—	—	—	—	—	—	6	2	3	2	13	32
39	Nephritis and Nephrosis ...	—	—	—	1	1	1	2	4	8	20	13	11	11	72	130
40	Hyperplasia of Prostate ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61
40	Complications of Pregnancy, Childbirth and the Puerperium ...	—	—	—	—	—	1	4	9	7	—	—	—	—	21	21
41	Congenital Malformations ...	52	6	4	—	2	1	2	—	1	1	1	2	—	72	147
42	Birth Injuries, Post-natal Asphyxia and Atelectasis ...	68	—	—	—	—	—	—	—	—	—	—	—	—	68	182
43	Infections of the Newborn—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Pneumonia ...	5	—	—	—	—	—	—	—	—	—	—	—	—	5	20
	Diarrhoea ...	1	—	—	—	—	—	—	—	—	—	—	—	—	1	5
	Others ...	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1
44	Other Diseases peculiar to early infancy and Immaturity Unqualified ...	61	—	—	—	—	—	—	—	—	—	—	—	—	61	153
45	Senility without mention of Psychosis, Ill-defined and Unknown Causes ...	11	3	—	—	—	—	—	1	1	11	10	36	90	163	376
46	All Other Diseases ...	6	—	1	3	1	2	2	6	17	21	27	44	37	167	268
50	Suicide, Road Traffic Accidents and other Violent Causes ...	25	2	3	10	6	1	4	11	13	21	17	26	77	216	598
54	Other Nervous Diseases ...	3	1	2	3	—	—	1	4	8	13	21	18	27	101	200
55	Other Diseases of Circulatory System ...	—	—	—	—	—	—	1	—	2	7	11	27	91	139	372
56	Other Digestive Diseases ...	2	—	—	—	—	1	—	—	3	6	10	16	16	54	93
	Total ...	303	27	22	28	19	35	42	139	268	512	867	1605	2111	5978	12,827

TABLE X.—GLASGOW.—STILLBIRTHS, DEATHS UNDER 1 YEAR AND DEATH-RATES PER 1,000 BIRTHS IN EACH MUNICIPAL WARD, FOR THE YEARS 1953 AND 1952

MUNICIPAL WARDS	Still-births 1953	Rate per 1,000 Births* 1953	Rate per 1,000 Births* 1952	Deaths —1 year 1953	Death Rate per 1,000 Births† 1953	Death Rate per 1,000 Births† 1952
1. Shettleston and Tollcross ...	10	13	19	22	28	42
2. Parkhead ...	8	21	21	16	44	29
3. Dalmarnock ...	20	21	33	30	32	51
4. Calton ...	19	33	45	22	39	20
5. Mile-end ...	24	28	22	43	51	48
6. Dennistoun ...	15	33	15	16	36	37
7. Provan ...	10	21	27	22	48	48
8. Cowlares ...	21	36	31	23	40	37
9. Springburn ...	19	32	25	27	46	21
10. Townhead ...	23	28	23	30	38	55
11. Exchange ...	9	25	26	11	31	43
12. Anderston ...	19	29	35	30	48	44
13. Park ...	9	25	33	13	36	50
14. Cowcaddens ...	14	22	24	26	41	35
15. Woodside ...	13	21	32	24	39	56
16. Ruchill ...	31	32	33	25	26	34
17. North Kelvin ...	9	17	35	10	19	28
18. Maryhill ...	11	22	20	13	26	47
19. Kelvinside ...	8	34	32	3	13	19
20. Partick (East)	11	30	20	15	43	29
21. Partick (West)	14	26	37	14	27	42
22. Whiteinch ...	13	38	17	15	45	37
23. Yoker ...	10	29	21	10	30	30
24. Knightswood ...	5	21	37	7	30	25
25. Hutchesontown	25	31	32	34	44	39
26. Gorbals ...	37	37	33	35	36	54
27. Kingston ...	18	30	30	24	41	51
28. Kinning Park	23	36	30	18	30	53
29. Govan ...	17	21	29	40	50	45
30. Fairfield ...	10	24	27	10	24	49
31. Craigton ...	6	13	25	13	28	30
32. Pollokshields ...	16	29	20	18	34	41
33. Camphill ...	7	26	7	8	31	25
34. Pollokshaws ...	22	26	28	31	37	31
35. Govanhill ...	12	27	23	10	23	41
36. Langside ...	7	21	15	6	19	40
37. Cathcart ...	4	13	15	5	17	15
Institutions ...	2	—	—	4	—	—
Harbour ...	—	—	—	—	—	—
CITY ...	551	27	27	723	36	41

* Live and Stillbirths.

† Live Births.

TABLE XII.—GLASGOW, 1951-1953.—ABSTRACT OF NOTIFICATIONS UNDER NOTIFICATION OF BIRTHS ACT, 1907, AND RESULTS OF VISITS.

	1953	1952	1951
Total Number of Notifications	20,986	21,082	20,705
Doctor at Home	5,779	5,657	5,612
Doctor in Nursing Home	1,310	1,426	1,336
Doctor in Institution	11,539	11,261	10,874
Maternity Hospital (Outdoor) Nurse ...	803	837	790
Midwife in Nursing Home	452	497	514
Certified Midwife	2	2	3
Municipal Midwife	1,093	1,395	1,567
Others	8	5	9
Total Cards issued	20,986	21,082	20,705
Total Cards returned	20,982	21,049	20,830
Full Information	20,672	20,713	20,449
Others	310	336	381

TABLE XIII.—GLASGOW, 1951-1953.—BIRTHS NOTIFIED SHOWING MEDICALLY AND NOT MEDICALLY ATTENDED.

	1953	1952	1951
Notifications Received— <i>less Duplicates</i> —			
Total	20,986	21,082	20,705
Live-births	20,430	20,500	20,123
Still-births	556	582	582
Per cent. Still-births to Total	2·6	2·8	2·8
Medically attended—			
Births at Home	5,779	5,657	5,612
Births in Nursing Home	1,310	1,426	1,336
In Institutions	11,539	11,261	10,874
Total	18,628	18,344	17,822
Per cent.	89	87	86·1
Still-births at Home	104	100	104
Still-births in Nursing Home	19	33	25
Still-births in Institutions	405	418	419
Not Medically attended—			
Maternity Hospital, Outdoor Nurse ...	803	837	790
Certified Midwives in Nursing Home ...	452	497	514
Certified Midwives in Private Practice	2	4	3
Municipal Midwives	1,093	1,395	1,567
Others	8	5	9
Total	2,358	2,738	2,883
Per cent.	11	13	14
Still-births	28	31	34

TABLE XIV.—GLASGOW, 1953 and 1952.—CASES OF INFECTIOUS DISEASE REGISTERED AND NUMBERS OF THESE TREATED IN FEVER HOSPITALS, &c.

	1953				1952			
	Fever Hosp.	Other Institutions	Home	Total	Fever Hosp.	Other Institutions	Home	Total
A.—Notifiable—								
Enteric Fever	4	—	—	4	1	—	—	1
Paratyphoid B	13	—	1	14	19	—	2	21
Continued and Undefined Fever	3	2	3	8	4	—	—	4
Puerperal Fever	199	3	—	202	†194	12	2	208
Puerperal Pyrexia	65	45	16	126	†55	42	8	165
Smallpox	—	—	—	—	—	—	—	—
Scarlet Fever	1,232	23	657	1,912	1,817	25	870	2,712
Diphtheria and Membranous Croup	*50	—	—	*50	*85	—	*1	*86
Erysipelas	97	2	121	220	109	—	128	237
Cerebro-spinal Fever ...	115	4	4	123	91	5	5	101
Ophthalmia Neonatorum	23	—	77	100	26	1	115	142
Trachoma	—	—	6	6	1	—	2	3
Acute Encephalitis Lethargica	—	2	—	2	1	—	3	4
Acute Polio-Encephalitis	—	—	1	1	—	—	—	—
Acute Poliomyelitis ...	47	1	2	50	32	1	2	35
Acute Primary Pneumonia	2,143	1,102	671	3,916	2,827	1,353	1,086	5,266
Acute Influenzal-Pneumonia	6	42	102	150	6	34	84	124
Malaria	22	1	1	24	21	2	6	29
Dysentery	1,571	200	951	2,722	1,401	59	833	2,293
Infective Jaundice	2	—	—	2	1	1	—	2
Anthrax	2	—	—	2	—	—	—	—
Pulmonary Tuberculosis	919	—	1,449	2,368	967	—	1,297	2,264
Other Forms of Tuberculosis	155	—	140	295	167	—	134	301
Whooping-cough	439	11	6,150	6,600	104	2	1,303	1,409
Leprosy	—	—	—	—	—	—	—	—
B.—Not Notifiable—								
Measles	479	20	4,379	4,878	526	12	6,334	6,872
German Measles	107	—	1,628	1,735	18	—	245	263
Chickenpox	186	4	7,157	7,347	225	19	5,705	5,949
Mumps	66	1	24	91	50	—	—	50
Pemphigus Neonatorum	50	—	5	55	11	—	1	12
Totals	7,995	1,463	23,545	33,003	8,759	1,568	18,166	28,493
Notified, but diagnosis altered to Non-Infectious Diseases ...	2,768	5	106	2,879	2,721	—	4	2,725
Total Registered	10,763	1,468	23,651	35,882	11,480	1,568	18,170	31,218

Where patients suffer from two or more diseases, each disease is reckoned as a case.

Apart from cases of pneumonia admitted to Corporation General Hospitals and Voluntary Institutions in times of pressure; cases of puerperal fever, puerperal pyrexia, and ophthalmia neonatorum occurring in other than Fever Hospitals and allowed to remain; and cases of trachoma treated in Stobhill Hospital; the cases shown under the headings "Other Institutions" are, for the most part, accidental.

* Includes Diphtheria Carriers (12 in 1953; 2 in 1952).

† Includes cases treated in Robroyston Hospital.

TABLE XVI.

OPERATIONS OF SANITARY SECTION.

1. (a) Nuisances	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1953	1952
INSPECTIONS made—							
Nuisances	56,045	65,012	87,333	68,960	77,952	355,302	371,307
Bug Disinfestation	263	988	1,236	633	1,152	4,272	7,544
Water Storage Cisterns	32	562	584	276	47	1,501	4,891
Limewashings	6,157	7,741	6,707	4,220	6,035	30,860	27,122
Stair Cleaning	2,079	2,420	1,231	1,947	3,497	11,174	14,064
Drain Testing	2,695	3,293	5,709	1,256	2,563	15,516	12,508
Rats and Mice Destruction Acts	5,611	4,668	3,112	3,969	2,950	20,310	20,388
Total	72,882	84,684	105,912	81,261	94,196	438,935	457,815
Nuisances removed or remedied	6,424	14,268	10,747	5,560	13,247	50,246	52,264
Consisting of—							
Apartments, Lobbies, or W.C.'s, with insufficient light or venti- lation, or otherwise defective in construction	—	—	—	2	—	2	7
Defective Chimneys causing nuis- ance	68	93	79	116	88	444	636
Disrepair or dampness in Dwelling- houses	555	1,217	768	516	1,926	4,982	6,076
Offensive smells from Drains, or other reasonable grounds— smoke test	—	2	1	1	1	5	4
Drains, Conductors, Soil-pipes, or Rones choked or defective ...	3,235	5,698	3,844	2,677	6,142	21,596	23,777
Sanitary Fittings choked or defective	329	799	391	443	849	2,811	3,255
Dirty Houses and Bedding and Children	1	10	869	23	24	927	967
Dirty Closets, Stairs, etc. (daily and bi-weekly cleaning) ...	27	959	23	26	56	1,091	746
Houses overcrowded	—	1,576	1,566	—	561	3,703	2,462
Common passages, stairs or stair- cases not in a cleanly state (limewashing or painting) ...	891	992	1,730	373	819	4,805	3,756
Animals or Poultry kept so as to be a nuisance	5	—	—	1	1	7	9
Accumulation of Garbage or Rubbish	79	135	18	47	53	332	308
Smells from Decaying Animal Matter or other cause	5	11	5	16	10	47	50
Stagnant Water	12	4	6	11	33	66	34
Premises infested with Rats or other vermin	768	807	529	814	515	3,433	2,590
Sink accommodation and Water Supply required	—	—	—	—	—	—	3
Water-Closet accommodation re- quired	2	—	—	1	—	3	3
Water Storage Cisterns dirty, uncovered, or unventilated ...	1	644	234	146	—	1,025	2,011
Water Supply Pipes defective tenants without water ...	99	121	23	34	367	644	740

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City	
						1953	1952
Pit Shaft without adequate protection	—	—	—	—	—	—	—
Reports to Gas Manager	—	—	—	1	4	5	1
„ Master of Works	137	575	158	90	914	1,874	1,906
„ Superintendent of Cleansing	1	22	—	6	23	52	120
„ Water Engineer	209	603	503	216	861	2,392	2,803
Prosecutions—Sheriff Court	6	18	—	6	5	35	38
„ Police Court	2	—	—	—	5	7	16
Number Successful	8	18	—	6	10	42	54
Amount of Fines and/or expenses	£1 0 0	£76 8 0	—	—	£34 16 0	£112 4 0	£32 1 0
Number of Rotation Cards for Cleansing of Common Stairs, Lobbies, and W.C.'s served on Tenants	636	6,257	74	460	1,467	8,894	4,011
1. (b) Drain Testing.							
Number of Applications for satisfaction of Dean of Guild Court	467	399	664	426	408	2,364	2,287
Number of first Applications to old Tenements or Systems	2	10	5	7	14	38	4
Number of these found more or less defective	—	—	—	—	—	—	2
Subsequent applications to old Tenements or Systems	—	—	—	—	—	—	5
2. Common Lodging Houses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register	7	4	6	—	2	19	19
With accommodation for	1,815	1,352	2,156½	—	518	5,841½	5,841½
Number of inspections by day	74	69	215	—	76	434	607
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities	9	16	—	—	14	39	156
Number of prosecutions	—	—	—	—	—	—	—
Amount of Fine	—	—	—	—	—	—	—
3. Boarding Houses for Emigrants and Seamen.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register	2	—	—	—	—	2	3
With accommodation for	267	—	—	—	—	267	364
Number of inspections by day	—	—	—	—	—	—	47
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTIONS—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953 1952	
4. Houses-Let-in-Lodgings.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	86	—	—	—	15	101	103
Number of inspections by day ...	—	9	—	—	34	43	17
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities ...	3	2	—	—	5	10	3
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of Fines ...	—	—	—	—	—	—	—
5. Farmed-out Houses.							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	60	—	98	—	—	158	176
Number of inspections by day ...	30	—	206	—	—	236	608
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities ...	4	—	—	—	—	4	8
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of Fine ...	—	—	—	—	—	—	—
6. Ticketed Houses.							
Number ticketed for first time ...	—	—	—	—	—	—	—
Total number now on register ...	—	699	1,367	—	447	2,513	2,717
Number of visits by day ...	—	—	—	—	—	—	—
Number of inspections by night	—	—	—	—	—	—	—
Number of cases of Overcrowding found and warned ...	—	—	—	—	—	—	—
Number of prosecutions ...	—	—	—	—	—	—	—
7. Tents and Vans.							
Number of inspections ...	—	85	348	10	23	466	438
Number of irregularities ...	1	1	6	—	3	11	6
Number of prosecutions ...	—	—	—	—	—	—	—
8. Mech. Bakehouses.							
Number measured and registered	2	—	4	—	3	9	10
Total number now on register ...	72	63	70	65	36	306	309
Number of inspections ...	364	284	190	165	184	1,187	1,176
Number dirty ...	40	21	20	11	13	105	124
Number Overcrowded ...	—	—	—	—	—	—	—
Number defective in light or ventilation ...	—	1	2	—	—	3	6
Number with sanitary convenience required ...	—	—	1	—	—	1	3
Number with sanitary fittings choked or defective ...	1	6	5	2	5	19	17
Number of other nuisances ...	11	5	15	1	12	44	63
Number of prosecutions ...	—	—	—	—	—	—	—

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953 1952	
9. Non-Mech. Bakehouses.							
Number measured and registered	—	—	—	—	1	1	3
Total number now on register ...	18	38	13	14	13	96	105
Number of inspections	45	73	47	76	51	292	490
Number dirty	6	9	2	3	—	20	30
Number overcrowded	—	—	—	—	—	—	—
Number defective in light or ventilation	1	—	—	—	—	1	1
Number with sanitary conveniences required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	1	—	—	—	—	1	—
Number of other nuisances ...	1	1	—	1	—	3	7
Number of prosecutions ...	—	—	—	—	—	—	—
10. Mech. Factories.							
Number registered	76	28	29	16	23	172	256
Total number now on register ...	1,596	661	857	494	662	4,270	4,307
Number of inspections	1,742	1,882	1,190	951	1,114	6,879	7,766
Number with sanitary conven- iences dirty	38	133	38	37	41	287	353
Number defective in light or ventilation	21	39	10	11	12	93	137
Number with sanitary conven- iences required	3	7	2	4	4	20	37
Number with sanitary fittings choked or defective	16	156	32	10	75	289	220
Number of other nuisances ...	25	57	26	14	60	182	283
Number of prosecutions ...	—	—	—	—	—	—	—
Amount of fine	—	—	—	—	—	—	—
Other parts of factory — Number of other nuisances ...	17	29	2	7	5	60	174
11. Non-Mech. Factories.							
Number measured and registered	18	2	3	2	—	25	55
Total number now on register ...	217	34	114	87	94	546	576
Number of inspections	258	95	111	299	151	914	1,390
Number dirty	4	8	3	12	16	43	58
Number overcrowded	—	—	—	—	—	—	—
Number defective in light or ventilation	1	3	1	2	2	9	18
Number with sanitary conven- iences required	—	—	—	—	1	1	2
Number with sanitary fittings choked or defective	—	2	2	2	4	10	7
Number of other nuisances ...	8	2	3	5	5	23	26
Number of prosecutions ...	—	—	—	—	—	—	—

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953	1952
12. Shops.							
Number of inspections	29	413	203	1,353	182	2,180	5,113
Number dirty	—	5	—	6	15	26	27
Number defective in ventilation, temperature or lighting	—	2	—	—	1	3	20
Number with sanitary conven- iences required	—	7	—	1	1	9	9
Number with washing facilities required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	11	24	—	32	10	77	78
Number of other nuisances ...	6	14	1	9	19	49	346
13. Fish Restaurants.							
Number of inspections	5	478	162	10	59	714	277
Number dirty	—	7	—	—	4	11	19
Number defective in light or ventilation	—	—	—	—	—	—	—
Number requiring sanitary conven- iences	—	—	—	—	—	—	—
Number with sanitary fittings choked, etc.	—	5	4	—	—	9	2
Number of other nuisances ...	—	3	—	—	6	9	9
14. Offices.							
Number of inspections	3	75	2	2	13	95	43
Number dirty	—	2	—	—	—	2	1
Number defective in light or ventilation	—	—	—	—	—	—	1
Number with sanitary conven- iences required	—	1	—	—	—	1	—
Number with washing facilities required	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective	1	—	—	—	—	1	1
Number of other nuisances ...	—	—	—	—	—	—	33
15. Homeworkers' Dwellings.							
Total number now on register ...	47	84	61	30	37	259	220
Number of inspections	88	80	99	—	172	439	190
Number found dirty	—	—	—	—	—	—	—
16. Bothies, Chaumers.							
Number of inspections	—	—	—	17	—	17	18
Number dirty	—	—	—	—	—	—	—
Number of other nuisances ...	—	—	—	1	—	1	7

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953 1952	
17. Workplaces.							
Number of inspections	3	386	1	2	36	428	—
Number dirty	—	28	—	1	2	31	—
Number defective in light and ventilation	—	4	—	—	—	4	—
Number of sanitary conveniences choked, etc.	—	13	1	—	1	15	—
Number of other nuisances ...	1	6	—	—	1	8	—
18. Piggeries.							
Total number now on register ...	5	18	23	8	2	56	57
Number of inspections	29	69	190	34	5	327	246
Number found dirty	—	9	11	—	—	20	19
Number of other nuisances ...	—	4	11	—	—	15	28
Number of prosecutions	—	—	—	—	—	—	—
19. Offensive Trades.							
Total number now on register ...	—	5	40	—	3	48	47
Number of inspections	—	44	367	—	11	422	444
Number of irregularities	—	7	3	—	—	10	41
Number of prosecutions	—	—	—	—	—	—	—
20. Rag Flock.							
Total number now on register ...	24	17	23	19	12	95	90
Number licensed	2	1	4	3	—	10	9
Total number of visits	90	17	40	28	12	187	203
Samples submitted for analysis ...	2	1	—	1	—	4	1
Certified not to conform to standard	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—
21. Broker's Premises.							
Total number of visits	32	68	39	13	18	170	105
Number dirty	—	—	—	—	—	—	1
Number of other nuisances ...	—	—	—	—	1	1	—
22. Cemeteries.							
Total number of visits	—	8	—	—	—	8	13

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953 1952	
23. Civil Defence Property.							
Number of inspections	—	—	—	—	—	—	51
Number dirty	1	14	—	2	—	17	13
Number defective in light or ventilation	—	—	—	—	—	—	—
Number with sanitary conven- iences choked, etc.	—	—	—	—	—	—	—
Number of other nuisances ...	1	3	—	—	9	13	4
24. Catering Premises.							
Number of inspections	378	195	17	54	14	658	...
Number dirty	10	23	—	1	—	34	...
Number defective in light or ventilation	2	4	—	1	—	7	...
Number of sanitary conveniences choked, etc.	1	4	—	—	—	5	...
Number of other nuisances ...	65	11	—	—	1	77	...
25. Infectious Diseases, etc.							
Infectious Diseases, visits ...	8,654	19,846	16,358	14,904	11,606	71,368	61,437
Institutional census	69	—	6	—	24	99	52
Care of Old People	32	80	29	477	178	796	79
Miscellaneous visits	25	37	28	15	26	131	—
26. Housing Acts.							
Total number of visits	1,496	5,350	3,199	2,375	2,299	14,719	26,788
Total number of pre-rehousing visits	2,056	4,195	3,911	2,010	1,517	13,689	...
27. Squatter's Premises.							
Total number of visits	62	20	7	723	41	853	2,350
Number of irregularities ...	2	—	—	4	—	6	...

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	East- ern	South- Eastern	South- Western	City 1953	City 1952
28. Work of Female Inspectors.							
Under the Glasgow Corporation (Police) Order, 1904—							
(a) Verminous Children.							
Number of visits to schools ...	115	369	429	117	72	1,102	1,082
Number of children submitted for inspection ...	11,137	34,896	31,410	9,841	9,752	97,036	96,887
Number of children found infested ...	7	121	238	117	3	486	523
Number of children found infested ...	2,207	9,885	4,734	1,183	985	18,994	20,275
Number of children found with fleas ...	—	225	142	25	14	406	400
Number of children found dirty	—	356	565	101	108	1,130	1,049
Number of written notices ...	—	35	175	298	5	513	246
Number of children cleaned by Guardians ...	763	1,742	2,924	2,156	547	8,132	9,219
Number of children cleaned by officers ...	—	2	—	30	—	32	15
Number of special visits ...	—	—	—	—	—	—	103
Number of children examined	—	—	—	—	—	—	—
Number of children re-inspected	3,602	9,716	11,939	3,698	2,029	30,984	34,757
Number of infectious diseases	—	—	—	—	—	—	25
(b) Homes of Verminous Children.							
Number of houses inspected ...	218	1,205	1,558	397	276	3,654	4,959
Number of houses found dirty	—	1	4	—	—	5	—
Number of houses with dirty bedding ...	—	—	2	—	—	2	—
Number of written notices ...	—	—	9	3	—	12	5
Number of re-inspections ...	—	11	106	213	—	330	447
Number of houses cleaned ...	—	8	14	—	—	22	8
Number of bedding cleaned ...	—	5	5	—	—	10	1
(c) House-to-House Visitation.							
Number of houses visited first time ...	77	80	69	526	17	769	1,396
Number of houses found dirty	—	4	10	7	2	23	28
Number of houses with dirty bedding ...	—	2	5	3	—	10	11
Number of houses—Written notices ...	1	—	17	4	—	22	13
Number of houses—Re-visits ...	8	7	9	876	2	902	1,439
Number of houses found cleaned	—	2	5	5	—	12	36
Number of houses—Bedding found cleaned ...	—	1	2	2	—	5	8

TABLE XVI—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	Central	North- ern	Eastern	South- Eastern	South- Western	City 1953 1952	
(d) Re-housing Scheme Visitation.							
Number of houses visited first time	3,268	31,419	34,017	3,895	7,215	79,814	86,396
Number of houses found clean	2,931	16,356	17,008	3,467	6,259	46,021	50,497
Number of houses found fair ...	334	14,865	16,198	417	951	32,765	34,927
Number of houses found dirty	3	198	811	11	5	1,028	972
Number of houses with dirty bedding	—	2	89	2	—	93	195
Number of written notices ...	—	2	674	—	—	676	865
Number of re-visits	150	355	1,153	565	2	2,225	1,971
Number of houses found cleaned	16	104	815	208	—	1,143	1,135
Number of bedding found cleaned	9	8	82	1	—	100	207
(e) Intermediate Housing Scheme Visitation.							
Number of houses visited ...	463	174	39	282	6	964	2,075
Number of houses found clean	297	108	35	267	4	711	1,712
Number of houses found fair ...	164	62	3	15	2	246	347
Number of houses dirty ...	2	4	1	—	—	7	16
Number of houses with dirty bedding	—	—	—	—	—	—	1
Number of written notices ...	—	—	—	—	—	—	5
Number of re-visits	20	13	—	—	—	33	42
Number of houses found cleaned	4	1	—	—	—	5	15
Number of bedding found cleaned	—	1	—	—	—	1	9

TABLE XVII.—GLASGOW.—POPULATION; BIRTHS AND DEATHS; BIRTH-RATES AND DEATH-RATES PER 1,000; ALSO DEATHS UNDER 1 YEAR, AND DEATH-RATES PER 1,000 BIRTHS SINCE 1891.

Year	Population	Births	Deaths	Birth-rate per 1,000	Death-rate per 1,000	Deaths under 1 Year	
						Number	Rate per 1,000 Births
1891	567,143	19,857	14,324	35.0	25.3	2,946	148
1901	761,925	24,206	16,197	31.8	21.2	3,607	149
1902	762,789	24,722	15,532	32.4	20.4	3,206	129
1903	763,654	25,135	15,073	32.9	19.7	3,663	146
1904	764,521	24,754	15,414	32.4	20.2	3,606	146
1905	765,389	24,316	14,460	31.8	18.9	3,195	131
1906	780,192*	24,560	14,889	31.5	19.1	3,223	131
1907	781,080	24,006	15,659	30.7	20.0	3,116	130
1908	781,969	23,915	15,265	30.6	19.5	3,284	137
1909	782,860	23,140	15,242	29.6	19.5	3,073	133
1910	783,785	22,222	13,395	28.4	17.1	2,694	121
1911	784,680	21,755	13,899	27.7	17.7	3,016	139
1912	785,600	22,044	13,797	28.1	17.6	2,740	124
1913†	1,021,789*	28,688	17,693	28.1	17.3	3,706	129
1914	1,028,440	29,462	17,522	28.6	17.0	3,913	133
1915	1,035,091	27,943	20,159	27.0	19.5	4,007	143
1916	1,041,742	27,094	16,601	26.0	15.9	2,996	111
1917	1,048,393	24,030	16,691	22.9	15.9	3,089	129
1918	1,055,044	23,524	18,362	22.3	17.4	2,660	113
1919	1,061,695	25,835	18,237	24.3	17.2	2,937	114
1920	1,068,346	32,626	16,765	31.5	15.7	3,477	107
1921	1,075,000	29,712	15,625	27.6	14.5	3,138	106
1922	1,074,607	28,298	17,850	26.3	16.6	3,401	120
1923	1,074,215	26,710	14,875	24.9	13.8	2,388	89
1924	1,073,822	25,330	16,868	23.6	15.7	3,005	119
1925	1,073,429	25,416	15,336	23.7	14.3	2,591	102
1926	1,090,380*	24,541	15,731	22.7	14.6	2,548	104
1927	1,089,988	23,578	15,439	21.6	14.2	2,527	107
1928	1,089,595	23,649	15,701	21.7	14.4	2,525	107
1929	1,089,202	22,799	17,760	20.9	16.3	2,438	107
1930	1,088,810	23,322	15,455	21.4	14.2	2,355	101
1931	1,088,461	22,926	15,505	21.1	14.2	2,397	105
1932	1,088,215†	22,732	16,071	20.9	14.8	2,542	112
1933	1,087,969	21,361	14,747	19.6	13.6	2,061	96
1934	1,087,723	21,822	15,234	20.1	14.0	2,140	98
1935	1,087,476	22,102	15,537	20.3	14.3	2,169	98
1936	1,087,230	22,273	16,406	20.5	15.1	2,429	109
1937	1,086,984	22,176	16,379	20.4	15.1	2,313	104
1938	1,092,968*	21,979	15,016	20.1	13.7	1,919	87
1939	1,092,722	21,682	15,010	19.8	13.7	1,737	80
1940	1,092,476	20,965	17,603	19.2	16.1	1,983	95
1941	1,092,229	20,365	16,301	18.6	14.9	2,267	111
1942	1,091,983	20,615	14,679	18.9	13.4	1,863	90
1943	1,091,737	22,363	14,824	20.5	13.6	1,825	82
1944	1,091,491	22,203	14,603	20.3	13.4	2,108	95
1945	1,091,245	20,294	13,941	18.6	12.8	1,379	68
1946	1,090,998	23,560	14,502	21.6	13.3	1,588	67
1947	1,090,752	25,829	15,266	23.7	14.0	1,989	77
1948	1,090,506	22,292	13,620	20.4	12.5	1,241	56
1949	1,090,260	20,923	14,203	19.2	13.0	1,033	49
1950	1,090,013	20,031	14,090	18.4	12.9	879	44
1951	1,089,767	20,091	14,312	18.4	13.1	922	46
1952	1,086,800	20,337	13,841	18.7	12.7	831	41
1953	1,085,000	20,232	12,827	18.6	11.8	723	36

* Extended City.

† Births and Deaths from 1913 are corrected for transfers.

† Intercensal populations and rates in the years 1932 to 1950 inclusive were revised in 1951.

APPENDIX B.

REPORT ON THE WORK OF THE
GLASGOW INFECTIOUS DISEASE
HOSPITALS

1953

APPENDIX B.

REPORT ON THE WORK OF THE GLASGOW
INFECTIOUS DISEASES HOSPITALS, 1953.

The following short selective summary of the work of the Glasgow Infectious Diseases Hospitals is condensed from the annual report of Dr. T. Anderson to the Western Regional Hospital Board by whose courtesy it is included.

There were fewer patients treated in Belvidere, Knightswood and Ruchill, 10,331 compared with 10,935 in 1952. Deaths numbered 359, a fatality rate of 3·5 per cent. (3·7 per cent. in 1952); 74 occurred in the first year of life and 200 over the age of 45. The fatality rate for patients under 1 year was 4·0 per cent., a low rate considering the serious illnesses of many babies.

Streptococcal infections (Scarlet Fever, Erysipelas, etc.) were fewer and caused no deaths, a remarkable record for a city the size of Glasgow.

There were only 54 confirmed cases of diphtheria and all recovered. There were fewer infections with the *gravis* type.

Meningococcal infections increased, 116 compared with 79. The fatality rate was 6·9 per cent., rather better than last year.

The treatment of Tuberculous Meningitis during the year was regarded as satisfactory and improved recovery rates were maintained. A controlled trial of 3 types of treatment is in progress. As babies are often infected by contact with adult cases of Tuberculosis, B.C.G. vaccination is likely to reduce the numbers in future years.

Out of 228 cases of Poliomyelitis in the Western Region available for analysis, 81* belonged to the City of Glasgow, and 48 of these were non-paralytic. A large proportion of the Glasgow cases were from the North West of the city. Modern developments in treatment kept the fatality rate low.

There were fewer cases of Pneumonia treated in the hospitals during the year by over 600. The fatality rate was about the same. Infection with influenza virus A caused a moderate rise in February and March.

Measles and Whooping Cough displayed no unusual features.

* These figures include several cases notified early in 1954.

The continuing and increased prevalence of Bacillary Dysentery reflects adversely on the standard of personal hygiene in the community. The infections carry no appreciable mortality but the spread of the trouble creates an epidemiological problem. Dr. Anderson suggests that routine isolation of dysentery cases in hospitals, though necessary under the circumstances, plays only a minor part in control.

Infection with *Salmonellae* caused 2 deaths out of 191 cases treated.

There were 23 deaths from Gastro-enteritis in children out of 808 patients treated, a low mortality rate.

Virus diseases continued to be investigated. No smallpox was detected during the year. Many serological tests were carried out chiefly for influenza and many attempts made to isolate viruses. One test yielded the first evidence of human Q fever infection in Scotland.

Dr. Anderson closes his report with a dissertation on accommodation in fever hospitals with special reference to the ultimate economic benefit of increased cubicle isolation accommodation.

APPENDIX B.—TABLE I.

FEVER HOSPITALS—STATEMENT OF CASES TREATED ACCORDING TO SEX, ETC., BASED ON DISMISSALS AND DEATHS
FOR YEAR 1953.

	Admitted		Dismissed		Died		Mortality per cent.	Average Residence		Altered Diagnosis	Ruchill		Belvidere		Knightswood		Total Days' Residence	
	Males	Females	Males	Females	Males	Females		Dis- missals	Deaths		Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths	Dis- missals	Deaths
Typhus Fever	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Enteric Fever	3	1	3	—	—	—	—	45	—	8	1	—	3	—	—	—	179	—
Paratyphoid Fever	7	8	6	9	—	—	—	34	—	14	7	—	8	—	—	—	517	—
Continued and Undefined Fever	1	2	—	—	—	—	—	—	158	—	—	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	605	647	620	666	—	—	—	14	—	193	472	—	701	—	113	—	17,602	—
Diphtheria and Membranous Group	27	22	26	28	—	—	—	50	—	230	27	—	27	—	—	—	2,716	—
Erysipelas	49	54	49	51	—	—	—	15	—	41	91	—	—	—	7	—	2,122	—
Cerebro-spinal Fever	63	68	57	51	3	5	6.9	25	9	406	89	8	11	—	8	—	2,661	73
Trachoma	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Acute Poliomyelitis	36	39	35	33	—	1	1.1	32	12	72	50	1	12	—	6	—	2,144	12
Acute Primary Pneumonia	1,231	733	1,147	662	77	60	7.0	24	10	1,341	640	57	783	48	386	32	43,875	1,394
Acute Influenzal Pneumonia	—	6	—	6	—	—	—	15	—	28	5	—	—	—	—	—	89	—
Malaria	25	—	25	—	—	—	—	9	—	3	15	—	5	—	5	—	228	—
Dysentery	901	683	873	678	2	—	0.1	17	11	175	665	1	728	—	158	1	26,710	22
Pulmonary Tuberculosis	126	84	116	87	15	3	8.1	81	25	—	55	5	125	7	23	6	16,424	446
Other Forms of Tuberculosis	59	58	49	64	12	10	16.3	192	50	—	45	12	43	7	25	3	21,729	1,094
Measles	259	228	269	228	2	3	1.0	16	19	68	262	3	198	2	37	—	8,047	95
German Measles	58	67	58	68	—	—	—	7	—	25	72	—	30	—	14	—	917	—
Whooping Cough	197	234	181	219	4	9	3.1	36	12	60	203	5	151	5	46	3	14,491	153
Chickenpox	93	79	100	89	—	—	—	17	—	19	13	—	159	—	17	—	3,175	—
Mumps	38	47	42	51	—	—	—	12	—	8	66	—	25	—	2	—	1,131	—
Veneral Diseases	54	37	51	36	2	2	3.1	40	33	—	36	2	51	2	—	—	3,501	131
Influenza	20	27	21	27	—	—	—	16	—	1	30	—	10	—	8	—	746	—
Leprosy	2	—	—	—	—	—	—	190	—	—	—	—	—	—	—	—	190	—
Anthrax	2	—	2	—	—	—	—	19	—	—	1	—	—	—	—	—	38	—
Infective Jaundice	2	—	1	—	1	—	50.0	21	4	21	2	—	—	—	—	1	21	4
Gastro Enteritis	362	230	301	218	—	—	—	27	15	266	210	11	196	6	113	6	13,997	339
Food Poisoning	74	120	73	116	12	11	4.2	25	11	44	71	—	111	2	4	—	4,659	22
Babies with Mothers	—	—	—	—	—	2	1.0	10	—	—	—	—	—	—	—	—	19	—
Unclassified (Staff)	—	—	—	—	—	—	—	18	—	—	5	—	4	—	1	—	177	—
No Apparent Disease	96	96	96	96	—	—	—	7	—	—	99	—	90	—	3	—	1,808	—
Others	1,385	1,634	1,271	988	79	44	5.2	16	19	—	1,212	44	872	62	175	17	36,046	2,380
Impetigo	7	8	7	8	—	—	—	14	—	—	11	—	4	—	—	—	213	—
Total	5,722	1,625	5,180	1,492	209	150	3.5	23	17	3,189	4,459	149	4,302	141	1,151	69	225,675	6,165
Phthisis	424	416	386	417	45	24	7.9	181	106	—	625	49	73	5	102	15	147,840	11,444

APPENDIX B.—TABLE II.
 FEVER HOSPITALS. DEATHS FROM CERTAIN CAUSES, ACCORDING TO SEX AND AGE, FOR THE YEAR 1953.

Diseases	MALES													FEMALES												
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total
Cerebro-spinal Fever	2	1	—	—	—	—	—	—	—	—	—	—	3	4	1	—	—	—	—	—	—	—	—	—	—	5
Infective Jaundice ...	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Polio-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Acute Primary Pneumonia ...	14	2	2	—	—	—	—	1	7	7	12	32	77	9	2	—	1	—	—	1	1	2	5	10	29	60
Influenzal Pneumonia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ...	—	1	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis ...	—	—	—	—	—	—	—	3	4	—	3	5	15	—	—	—	—	—	—	—	—	1	1	1	—	3
Other Forms of Tuberculosis ...	—	1	3	4	—	1	—	—	—	1	—	2	12	1	3	2	1	—	1	1	—	—	—	1	—	10
Measles ...	1	1	—	—	—	—	—	—	—	—	—	—	2	2	—	1	—	—	—	—	—	—	—	—	—	3
Whooping Cough ...	2	1	1	—	—	—	—	—	—	—	—	—	4	5	4	—	—	—	—	—	—	—	—	—	—	9
Chickenpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Veneral Diseases ...	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	1	1	2
Others ...	6	2	3	2	—	—	—	5	4	15	14	28	79	4	1	1	2	—	2	2	1	4	5	7	15	44
Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gastro Enteritis ...	12	—	—	—	—	—	—	—	—	—	—	—	12	11	—	—	—	—	—	—	—	—	—	—	—	11
Food Poisoning ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	2
Total ...	37	9	9	6	—	1	—	9	15	23	30	70	209	37	11	5	4	—	3	4	2	7	11	20	46	150
Phthisis ...	—	—	—	—	—	—	4	5	10	10	12	4	45	—	—	—	—	—	2	5	5	6	1	4	1	24

APPENDIX B.—TABLE III.

FEVER HOSPITALS. DISMISSALS AND DEATHS ACCORDING TO SEX AND AGE, FOR THE YEAR 1953.

	MALES														FEMALES													
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	65+	Total		
Enteric Fever ...	—	1	—	13	—	—	—	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	1		
Paratyphoid Fever ...	—	1	4	1	—	—	—	—	—	—	—	—	6	—	1	2	1	—	1	—	—	—	1	—	1	9		
Continued and Undefined Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Puerperal Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Puerperal Pyrexia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Scarlet Fever ...	5	28	236	247	71	10	11	10	1	1	—	—	620	3	29	211	307	90	17	1	6	2	—	—	—	666		
Diphtheria and Membranous Croup ...	—	—	6	14	5	—	1	—	—	—	—	—	26	—	—	8	11	1	6	2	—	—	—	—	—	28		
Erysipelas ...	27	11	13	4	1	1	—	3	15	13	8	8	49	30	11	10	1	2	3	2	3	6	12	12	12	51		
Cerebro-spinal Fever ...	—	—	—	—	—	—	—	1	1	—	—	—	60	—	—	—	—	1	—	—	—	—	1	—	1	56		
Trachoma ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Encephalitis Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Acute Poliomyelitis ...	2	4	11	8	7	1	1	1	—	—	—	—	35	3	5	12	3	3	1	4	2	1	—	—	—	34		
Acute Primary Pneumonia ...	142	107	110	73	21	47	33	70	121	169	157	174	1,224	98	60	86	49	26	16	20	50	63	56	79	119	722		
Acute Influenzal Pneumonia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Malaria ...	—	—	—	—	—	—	22	2	—	1	—	—	25	—	—	—	—	—	—	—	2	1	—	—	3	6		
Dysentery ...	89	191	338	143	43	8	7	15	9	13	5	14	875	85	123	236	103	22	24	17	24	12	11	11	10	678		
Pulmonary Tuberculosis ...	4	5	15	17	17	11	5	12	9	14	13	9	131	3	2	5	13	10	22	12	7	5	6	3	2	90		
Other Forms of Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Measles ...	34	67	112	50	2	2	3	1	3	1	—	2	61	2	6	10	5	11	17	8	6	8	—	1	—	74		
German Measles ...	1	2	18	16	9	8	4	—	—	—	—	—	271	30	50	101	30	11	13	5	3	1	—	—	—	231		
Whooping Cough ...	63	44	60	18	—	—	—	—	—	—	—	—	58	1	5	11	17	6	6	10	5	—	—	—	—	68		
Chickenpox ...	7	10	38	26	8	2	6	3	—	—	—	—	185	81	40	86	19	2	5	1	1	—	—	—	—	228		
Mumps ...	—	1	14	12	1	5	3	4	2	—	—	—	100	6	10	36	23	2	4	6	5	1	—	—	—	89		
Veneral Diseases ...	—	—	—	—	—	—	2	9	12	9	15	6	42	—	4	19	10	2	4	6	15	6	4	1	1	3		
Influenza ...	2	—	—	4	1	2	2	3	3	3	—	1	21	1	1	—	1	1	1	3	3	7	4	3	2	27		
Leprosy ...	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—		
Anthrax ...	—	—	—	—	—	—	—	—	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—		
Infective Jaundice ...	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—		
Gastro Enteritis ...	304	9	—	—	—	—	—	—	—	—	—	—	313	223	4	—	8	—	—	1	—	1	—	—	—	229		
Food Poisoning ...	8	7	11	5	3	3	6	6	12	3	6	3	73	16	2	9	—	2	11	20	20	4	13	6	7	118		
Babies with Mothers Unclassified (Staff) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	2	—	—	—	—	—	2		
No Apparent Disease ...	38	17	18	9	4	1	3	2	1	—	1	2	96	31	10	17	9	3	4	9	6	2	3	1	1	96		
Others ...	280	147	217	172	68	42	43	53	53	91	82	99	1,350	198	110	123	110	56	56	43	70	54	59	65	88	1,032		
Impetigo ...	2	2	3	—	—	—	—	—	—	—	—	—	7	1	1	5	1	—	—	—	—	—	—	—	—	8		
Total ...	1,009	660	1,240	832	269	156	151	195	241	323	289	318	5,689	814	474	988	720	239	223	175	233	175	170	183	218	4,642		
Phthisis ...	2	4	4	16	17	41	57	85	71	75	41	15	431	—	1	7	11	28	107	106	111	40	15	9	3	411		